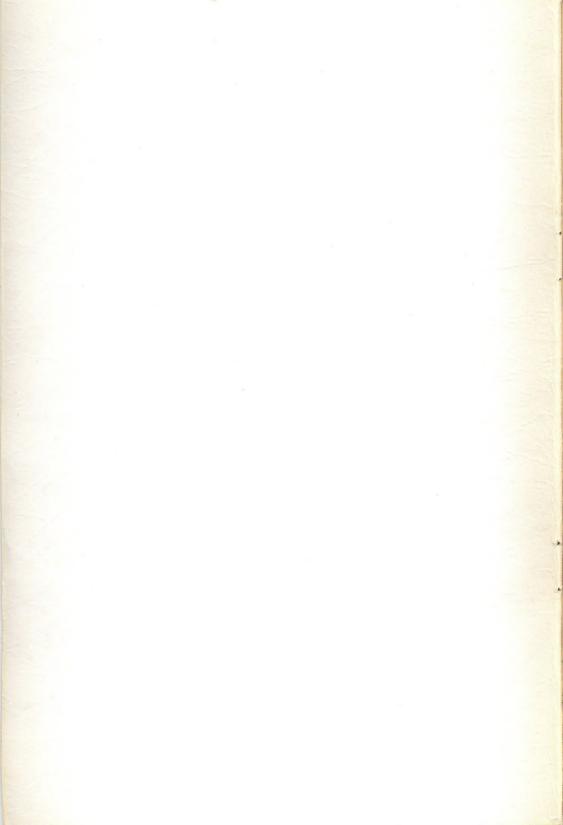
MISSOURI SOUTHERN COLLEGE

Announcements - - 1966 - 1967



Missouri Southern College

Operated by

THE JUNIOR COLLEGE DISTRICT OF JASPER COUNTY, MISSOURI

Announcements and General Information

ISSUE FOR

1966 - 1967

ACCREDITED

State Department of Education
North Central Association of Colleges and Secondary Schools

MEMBERSHIPS

American Association of Junior Colleges

American Association of Collegiate Registrars and Admissions Officers

National Junior College Athletic Association

North Central Association of Colleges and Secondary Schools

Council of North Central Junior Colleges

Higher Education Division of the National Education Association

Missouri College Newspaper Association

Missouri Association of Collegiate Registrars and Admissions Officers

National Commission on Accrediting

Missouri Southern College Joplin, Jasper County, Missouri

MISSOURI SOUTHERN COLLEGE

TABLE OF CONTENTS

THE BOARD OF REGENTS	5 5 6 7 68
SECTON 1:	
GENERAL INFORMATION	12
Historical Statement Purposes Accreditation Armed Service Information Adult Education Building and Equipment Student Personnel Services Instructions to New Students	12 13 13 13 13
GENERAL REGULATIONS	
Admission Advanced Standing Examination Requirements for Graduation Grades and Grade Reports Honors at Graduation Quantity and Quality of Work Class Attendance Withdrawals Changes in Programs Classification of Students Expenses and Payments Students' Activities	19 20 21 21 22 22 22 22 23 23
SECTION 2:	
Explanation Agriculture Curriculum Nursing Curriculum Arts and Science Curriculum Business Administration Curriculum Business, General Business, General (one year) Dental Curriculum	30 31 32 33 34 35

	Engineering Curriculum	37
	General Culture Curriculum	38
	Journalism Curriculum	39
	Law Curriculum	40
	Medical Curriculum	41
	Medical Technologist Curriculum	42
	Music Curriculum	43
	Optometry Curriculum	45
	Pharmacy Curriculum	46
	Physical Education Curriculum	47
	Physical Therapy Curriculum	48
	Social Work Curriculum	49
	Elementary Education Curriculum	50
	Secondary Education Curriculum	51
SECTON	3:	
	Description of Courses	52
	Explanation	
SECTION	1.4.	
SECTION		70
	Technical Education Division	
	Electronic Technology	71
	Mechanical Technology	73
INDEX .		78

MISSOURI SOUTHERN COLLEGE

1966 - 1967

BOARD OF REGENTS

Mills H. Anderson Fred Hughes Norval M. Matthews L. R. Reynolds, Jr. Thomas E. Taylor

OFFICERS

Fred Hughes, President Thomas E. Taylor, Vice President Elvin Ummel, Secretary Gene Taylor, Treasurer

BOARD OF TRUSTEES

1966 - 1967

Fred Hughes Norval M. Matthews L. R. Reynolds, Jr. Gene Taylor Thomas E. Taylor Elvin Ummel

OFFICERS

Fred Hughes, President Gene Taylor, Vice President Norval M. Matthews, Secretary Mills H. Anderson, Treasurer

MISSOURI SOUTHERN COLLEGE CALENDAR FOR YEAR 1966 - 1967

1966 - SUMMER SESSION

June 8 (9:00 a. m 4:00 p. m.) Summer Session Registration
June 9 (7:00 a.m.) Classes Convene
July 4 Holiday
July 5 (7:00 a. m.)
August 5 Summer Session Ends

1966 - FIRST SEMESTER

1967 — SECOND SEMESTER

January 25 (9:00 a. m 400 p. m.) Registration for Sophomores
January 25 (6:30 p. m.) Registration for Evening Division
January 26 (9:00 a. m 4:00 p. m.) Registration for Freshmen
January 27 (9:00 a. m 12:00 noon) Registration for Freshmen
January 27 (1:00 p. m 4:00 p. m.) Registration for Students
Tested Late and Transfer Students
January 30 (8:00 a. m.)
February 3 Last Day for Late Enrollment and Course Change
March 22 Mid-Semester Grade Notices
March 23-27 Easter Holidays
March 28 Classes Reconvene
March 24, 25, 26, and 29 May 26,29,314 fees J. Final Examinations May 30 Memorial Day - Classes Dismissed
May 30 Memorial Day - Classes Dismissed
June 2 Second Semester Ends
June 4 (3:00 p. m.) Baccalaureate
June 4 (3:00 p. m.) Baccalaureate June 5 (8:00 p. m.) Commencement Exercises

January 23 (8:30 a. m.)Counseling Tests for All New Students

ADMINISTRATION

Leon C. Billingsly
Paul R. Shipman
Fred Cinotto
(Position to be Filled) Dean of Instruction
Lloyd L. Dryer
Dudley F. Stegge
James K. Maupin Dean of Semi-Professional and Technical Programs B. S., Central Missouri State College M. S., Kansas State College of Pittsburg
Margaret Mitchell
Mrs. Loretta Frazier Librarian B. S, Norhtwest Missouri State College B. S. in Library Science, University of Illinois
Mrs. Betty Barcom
Mrs. Mary Johnson Secretary
Mrs. Neoma Moore Secretary to the Registrar
Carol Swanson Secretary to the President
John F. Johnson Purchasing Agent
Mrs. Anna Holly Cashier and Bookkeeper

INSTRUCTORS

V I Andones		14 1 1 1 5
V. L. Anderson	0 11	. Mechanical Drawing
B. S., Northwest Missouri State Stout Institute, Menomonie, W M. S., Kansas State College of	isconsin	
Dale R. Bates		Art
B. A. and M. A., The Universit	y of Tulsa	/ 11
Russell E. Benzamin Theory, B. S., Southwest Missouri State M. A., Colorado State College Student of Wilfred Adler, Dale	College	
David C. Bingman	College of	Biology and Zoology Pittsburg
Arthur Boles		Art
B. F. A., Chicago Art Institute M. S. A. E., Illinois Institute of		
Milton W. Brietzke		Speech and Drama
A. A., Sacramento City College A. B., San Jose State College M. A., Western Reserve Univers	Э	
C. E. Cowan		Commerce
B. S., Southwest Missouri State M. Ed., University of Missouri		
Ervin J. Dunham Chmn. of the A. A., Missouri Southern College B. J., A. B., B. Mus., University M. Mus., University of Colorada A. Mus. D., University of Arizot	ge of Missouri o	nanities and Fine Arts
Larry D. Dunham		English
A. A., Missouri Southern Colleg B. A., M. A., University of Miss	е	
John G. Eli	feyville, Ka	nsas
B. A., M. A., University of Arka	nses	English
John Barry Gilmore B. B. A., Evangel College, Sprin M. A., The University of Tulsa	ngfield, Mis	Commerce
Harry C. Gockel	History, Ed	conomics, Geography

INSTRUCTORS

R. Wayne Habermehl
Cleetis Headlee English and Journalism B. S., A. M., University of Missouri
T. L. Holman
Mrs. Julie Hughes History B. S., M A., Kansas State College of Pittsburg
Duane L. Hunt
Paul E. Jensen
J. Merrell Junkins
B. A., Kansas State College of Pittsburg M. S., Kansas State University of Agri. and Applied Science
Mrs. Kathryn Koger Commerce B. S., Kansas State College of Pittsburg M. B. E., The University of Tulsa
Douglas Landrith
J. Larry Martin
Martha Ann McCormick
Louis D. McMillan Electronics Technology B. S., Southwest Missouri State College
Mrs. Grace Clayton Mitchell English and Speech A. B., Greensboro College M. A., Pennsylvania State University

INSTRUCTORS

INSTRUCTORS
Eula Ratekin Chemistry
A. A., William Woods College, Fulton, Missouri A. B., A. M., University of Missouri
Gail K. Renner
B. S., Southwest Missouri State College M. A., University of Missouri, Kansas City M. A., University of Missouri, Columbia
Alfred H. Rogers English B. S., M. A., Kansas State College of Pittsburg M. A., University of Missouri, Columbia
Bobbie Z. Short English B. S., Southwest Missouri State College M. S., Kansas State College of Pittsburg
Lela A. Smith English
A. B., and B. S., Dury College A. M., George Peabody College for Teachers
Oliver Sovereign
Mrs. Lillian Spangler
Dorothy Stone
A. I. J. C. J. J. Physics
Arthur L. StrobelPhysics B. S., Southeast Missouri State College M. S., University of Arkansas
Mrs. Annetta St. Clair
Ronald Toman
Mrs. Ima J. Van Natter English A. B., Friends University, Wichita, Kansas M. S., Kansas State College of Pittsburg
Mrs. Ruby A. Wiley English and Foreign Languages B. S., Southwest Missouri State College M. A., University of Missouri
Keith Wormington
Venus Yount

APPLIED MUSIC

Mrs.	Marguerite Carney
Sara	Anne Gilstrap
Mari	e A. Guengerich
Robe	A. Harris
Mrs	M. H. Harutun
Willi	am J. Lebedeff
Jame	es R. NormanTrumpet Mus. B., Drury College; M. Mus. Ed., University of Colorado
Mrs.	Mary Bingham Porter
Mrs.	Lorraine Riley
Mrs.	Roberta Sovereign

SECTION 1

GENERAL INFORMATION

The information given in this catalog s for the school year 1966-1967. Changes may be made at any time. Any student registered in Missouri Southern College should refer to his catalog frequently to guide his progress. He will find statements on almost any problem that may arise. All decisions will be based on what is stated in the catalog. Any individual, interested in attending the College, can find details of requirements for registration, fees and other matters herein.

HISTORICAL STATEMENT

Missouri Southern College is operated by the Junior College District of Jasper County, Missouri...

In September, 1937, Joplin Junior College opened classes for the first time. Supported by the taxpayers of the Joplin School District, housed in the same building with Joplin Senior High School and functioning through the Extension Division of the University of Missouri, the College was organized as part of the Joplin school system.

On September 6, 1938, the College moved into its own buildings located at Fourth and Byers and offered a full two-year program. Franklin Technical School, 13th and Pearl, was dedicated March 21, 1948, and has continued to offer college-level technical programs. In 1958, the College was moved from the Byers Avenue Campus to the present location, 310 West Eighth Street.

April 7, 1964, the Junior College District of Jasper County, Missouri was created under the administration of a six-member Board of Trustees elected by the Citizens of the College District. The District is made up of all of Jasper County and parts of Newton, Lawrence and Barton Counties. Jasper County Junior College was the name commonly used during the 1964-1965 year. In anticipation of the possible passage of Missouri House Bill 210, the College Board of Trustees adoped the name of Missouri Southern College, May, 1965.

July 22, 1965, Governor Warren E. Hearnes signed the Bill creating Missouri Southern State College, governed by a five-member Board of Regents appointed by the Governor. Missouri Southern State College will offer its first upper division courses in the fall of 1967.

PURPOSES

The particular objectives of Missouri Southern College are four in number:

- (I) To provide an Arts and Science curriculum for those expecting to continue in colleges and universities.
- (2) To provide semi-professional curriculums that will enable the graduate to enter fields bordering on the professional or technical work that does not require graduation from professional schools.
 - (3) To provide as many terminal vocational curriculums as pos-

sible; to meet the needs of a larger number of students who may not wish to, or cannot, give more than two years further preparation for their life's work.

(4) To provide opportunity for individuals not interested in college degrees, to enrich their cultural backgrounds and to improve and advance themselves vocationally.

ACCREDITATION

Missouri Southern College is a member of the American Assocition of Junior Colleges, and is accredited by the North Central Association of Colleges and Secondary Schools, and by the State Department of Education.

ARMED SERVICE INFORMATION

Veterans

The College is accredited with the Veterans Administration. Students who are entitled to receive government benefits should contact the college office on Registration Day.

Selective Service

Undergraduate College Student Certificates (Form 109) are sent from the office of the Registrar to the respective Draft Boards so the students currently enrolled may secure educational deferment. All male students may request that Form 109 be sent if they are registered with the Draft Board and doing satisfactory work.

ADULT EDUCATION

College-credit courses are offered in the evening program to accommodate those who must work during the day. Any course offered in the day program will be offered in the evening if there is sufficient demand. A minimum of fifteen students is required. The tuition is seven dollars per semester hour plus a dollar registration fee each semester except courses offered in the Franklin Technical School.

BUILDINGS AND EQUIPMENT

The College campus is located at 8th Street and Wall Avenue. It is within walking distance of the business district and bus terminals accessible by highways, and on interurban bus routes and is adjacent to the Joplin Carnegie Library.

Franklin Technical School is located at Thirteenth and Pearl Avenue. This large building contains the classrooms and laboratory areas for the electronic and mechanical technology curriculum and the of-

fice of the Director of Technical Education. This is one of the best equipped technical schools in this section of the country.

All football games are played at Junge Stadium, Thirteenth and Murphy Avenue, and basketball games are played in the Memorial Hall located at 212 W. 8th Street.

STUDENT PERSONNEL SERVICES

The Library

The College Library plays an integral part in the educational development of the students. The collection of 16,000 books, 114 periodicals and 6 daily newspapers has been carefully selected and offers an exceptional collection of standard and recent materials in reference, research, and the fields covered by the various curriculums.

Two reading and reference rooms provide adequate seating capacity. Open book stacks, the reference collection and newspapers are housed in the main reading room, while current and bound magazines are conveniently arranged in an adjacent periodical room. All students have stack privileges and are encouraged to select books for class work and recreational reading. Magazines and books placed on reserve reading lists are checked for overnight use only; books not so reserved may be checked for two-week periods.

In addition to the College collection, facilities of the Joplin Carnegie Library, are available to students and faculty for consultation.

Living Quarters for Students

Students who come from outside Joplin can find sleeping rooms with kitchen privileges, and small apartments in many private homes easily accessible to the College. Rooms are also available for students at the Y.M.C.A. and the Y.W.C.A. Residences. (Application should be sent directly to the Y.M.C.A. or the Y.W.C.A Residence.)

Counseling

Every student at some time needs personal and individual help if he is to improve his planning and solve his problems. To insure each student of this help, a faculty adviser is assigned at the beginning of the freshman year. The duties of these advisers are threefold: (1) to help the student in planning his course of study and in solving his scholastic problems so that he may get the best education commensurate with his ability and capacity, (2) to assist the student to choose a vocation, prepare for, enter upon, and progress in it, and (3) to help the student to make his own decisions with respect to personal problems.

GUIDANCE EXAMINATIONS

Each student entering Missouri Southern College for the first time is required to take a series of tests.

Tests administered at the College are those given by the University of Missouri and other Missouri colleges that are members of the

Missouri College Cooperative Program. These tests are administered to high school seniors during the spring semester and can be taken from any one of these centers. High school seniors will be notified of the time and place of the tests through their high school offices.

SCHOLARSHIPS

On April 2, 1957, The Board of Education of the School District of Joplin established two Scholarships in memory of Mr. H. E. Blaine, the first Dean of the Joplin Junior College. These scholarships, based on academic achievement, are awarded by Missouri Southern College to the highest-ranking boy and girl at the end of their freshman year and are to be used the following year in Missouri Southern College.

The College Alumni Association offers a scholarship open to any student nominated by an alumnus. Preference, however, will be given to sons and daughters of alumni.

Nominations for the Alumni Scholarship must be mailed to the Alumni Scholarship Committee, Missouri Southern College, before April 15.

The College offers scholarships to high-ranking high school graduates. These scholarships are sent to the administrators of the high schools and the recipients are selected by them. To be eligible, a student must rank in the upper ten per cent of the graduating class.

Scholarships are also offered to students who have demonstrated their ability to give outstanding performances in athletics, drama or music. Scholarships are for one year and students must participate in the activities for which the scholarships are granted.

The BANK OF CARTHAGE, Carthage, Missouri, offers a scholar-ship annually to an outstanding freshman student to be used during the sophomore year. Applications must be received by April 15, of the student's freshman's year and should be addressed to the Missouri Southern College, Scholarship Committee.

The RUSSELL BELDEN MEMORIAL SCHOLARSHIP FUND: Scholarships will be awarded from the Fund at the beginning of each year to selected members of the Sophomore Class on the basis of need, scholarship and character. The recipients must spend their sophomore year in pursuit of an associate degree from Missouri Southern College.

The CIRCLE K CLUB of Missouri Southern College offers a sophomore scholarship to a male student completing his freshman year at the college with a cumulative grade-point average of 2.3. The scholarship is based on need, leadership in the college and scholarship. Applications must be received by April 15, of the student's freshman year and should be addressed to Missouri Southern College, Scholarship Committee.

The ADA COFFEY SCHOLARSHIP: In 1963, a former student established a scholarship in the name of Miss Ada Coffey, instructor in English and literature at the College from September 1937, to August 1963. The recipient of the scholarship must pursue an Associate in Arts degree from Missouri Southern College.

The Assembly

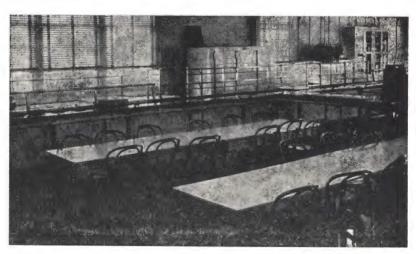
The College offers various programs that are entertaining, informative, esthetic, and spiritual.



Central Auditorium and Assembly

The Cafeteria

The Cafeteria has the facilities for serving several hundred students. The policy of the Cafeteria is to serve well balanced meals at a very low cost to the students.



The popular gathering place at noon and between classes

Student Loans

THE IRWIN MEMORIAL FUND was established in memory of Arnold E. Irwin, instructor of political science at Joplin Junior College from 1946 to 1959. The Exchange Club of Joplin created a loan fund for deserving students of Missouri Southern College. The fund is available to students for emergency short-term loans. No security is required of the borrower, except that a note will be drawn up at the time the loan is made, for interest to begin at a time set by the adviser and the student. No interest will be charged before the time set in the adviser-student conference. The fund is administered by the Finance Officer and an advisory committee of the College.

Missouri Southern College participates in the NATIONAL DEFENSE STUDENT LOAN PROGRAM. The purpose of the Program is to provide student loan funds for making long-time low-interest loans to students to pursue their college education.

Institutional Capital Contributions for the National Defense Student Loan Program have been obtained by donations from former students, funds of inactive student organizations and, a donation, on December 1, 1960, from the Kappa Upsilon Pi Study Club of Joplin.

To be eligible for a loan, a student must be in need of the amount of the loan, pursue a course of study at the institution, be capable of maintaining good standing in the courses, and have been accepted for enrollment as a student, or if already attending an institution, be in good standing and in attendance. Requests for application blanks may be addessed to the Dean of Semi-Professional and Technical Programs.

Work-Study Program

Missouri Southern College is participating in Title I-C of the Economic Opportunity Act of 1964. This section of the act is commonly referred to as the College Work-Study Program and is designed to provide jobs for college students whereby they may earn a significant portion of their current expenses while attending College. In order for students to be eligible to participate in this program, they must show that the financial aid received is necessary for them to attend college.

Further information pertaining to this program may be obtained by contacting the Director of the Work-Study Program at the College.

Placement Service

The College maintains a placement service and is constantly informed at to available positions in the business district. Graduates are assisted in finding full-time jobs and students are assisted in finding part-time employment.

Write to the office of the Dean of Students for information.

Registration

Former students should request permits to enroll at least one week in advance of registration.

Permits to enroll will be available to new students and freshmen during the Counseling Test session or those students may obtain the permits in the office of the Registrar.

INSTRUCTIONS FOR NEW STUDENTS

Because it is sometimes difficult for the beginning student to know just what is expected of him, the following information has been compiled and is printed here for convenience.

A student entering Missouri Southern College as a freshman in the fall of 1966 is expected to:

- I. Furnish a transcript of his high school work. The prospective student should request the Principal of his high school to send the transcript to the Registrar prior to September 1, 1966.
- 2. Attend the counseling test session Tuesday, September 6, 1966; 8:30 A. M. 12:30 P. M.
- (A student who has participated in the Missouri College Cooperative Program of Testing in the current year, will be excused from the above testing session.)
- 3. Register on Registration Day, September 7, 8 or 9, 1966, and pay tuition and fees.
- 4. Attend the Orientation Session for all new students at 9:00 A. M., Saturday, September 10, 1966, in the College Auditorium.



Main Corridor, Second Floor, Bulletin Boards and Trophy Cases

GENERAL REGULATIONS

ADMISSION

Admission by Certificate

The College regularly admits without examination graduates of fully accredited high schools of Missouri. A student entering from out of state must be in the upper two-thirds of his high school class. At least fifteen units of high school credits must be presented including

English, 3 units — Social Science, 3 units

Mathematics, I unit — Science (with laboratory), I unit

The remainder of the fifteen units may be selected from any courses accepted by an accredited high school for its diploma, with the exception of physical education and military science. It is highly recommended that the above required units should be increased to English, 4 units; social science, 3 units; mathematics, 2 units, and science, (with laboratory), 2 units.

Non-graduates from accredited high schools who present 15 acceptable units will be admitted by certificate if they are recommended for college admission by the high school principal or superintendent.

All candidates are expected to meet the specific admission requirements, if any, of the curriculum they desire to enter. See Section 2.

A prospective student should request the principal of his high school to send a transcript of his work to the Registrar's Office. The diploma will not be accepted as a credential.

Veterans

A man or woman whose formal education has been interrupted by military service and who has not attended high school, or has not completed a high school program, may qualify for admission by taking the General Education Development tests prepared by the Armed Forces Institute, or by taking comparable forms of the same tests after separation from service.

Students Transferring from Other Colleges and Universities

A student who has been regularly admitted to another college or university of recognized standing may be admitted to Missouri Southern College upon presentation of a "Statement of Honorable Dismissal." An official transcript of all college work should be filed with the Registrar prior to enrollment.

Special Students

Persons over twenty-one years of age who have not completed requirements for admission and who present evidence of special preparation and attainment may be admitted to the College as "Special Students." These students may become candidates for degrees when regular admission has been established. "Special Students" are required to take all examinations in their courses, and are subject to the same scholastic requirements as regular students.

Auditors

With the consent of the Registrar and the instructors concerned, students may be admitted to any course as Auditors. Auditors must be registered and must pay fees, but are not required to take examinations. They receive no college credit.

ADVANCED STANDING EXAMINATIONS

A student whose educational experiences appear to have given him proficiency in a course (required in his curriculum) equivalent to that ordinarily attained by those taking the course in regular class, may be granted permission to take an advanced-standing examination in the course. The examination shall be a comprehensive one, designed to cover the subject more fully, and shall be broader and more complete than a regular final examination.

In addition to having the above qualifications, a student, in order to qualify for an advanced examination, must

- (ϵ) be enrolled in this college at the time of the examination;
- (b) be working toward a degree from this college;
- (c) lack more than one semester's work toward meeting the requirements for graduation;
- (d) not have credit in a more advanced course in the same field;
- (e) have the approval of the dean and the instructor of the course;
- (f) not have taken an examination over the course within the preceding six months;
- (g) pay a fee of five dollars for each examination.

After the student takes the examination, the instructor will turn in a grade for the course, provided the grade is "C" or better.

REQUIREMENTS FOR GRADUATION

Associate degrees are conferred at the close of the second semester of each school year: Associate in Arts; Associate in Business; Associate in Science; Associate in Technology.

General education requirements for all students who graduate from Missouri Southern College are English and speech courses, eight hours, American History or government courses, five hours and physical education, two hours. Students who are enrolled in General Business and in the Technology Curriculums may substitute Business Communications for English 2, and technology students may omit speech from their curriculums. A total of 64 hours and 128 grade points is required for all associate degrees and may include as many as four hours of physical education.

In order to receive the Associate Degree, the candidate must have been regularly admitted to the college and must have met all admission requirements for the curriculum that he is following. (Any student unable to participate in the physical education program must obtain special permission from the Dean to be excused. He must substitute academic credits for the physical education credits from which he is excused.)

He must have satisfied the course requirements for one of the degree plans in Section 2 or Section 4.

He must have completed at least 12 semester hours of consecutive courses at Missouri Southern College, including at least three semester hours his final semester.

GRADES AND GRADE REPORTS

The following marks are used in grading: A, B, C, D, F, W, and WF. They are defined as follows:

A—Excellent

B—Superior
C—Medium, or Satisfactory
D—Below average; Passing

F—Failing; No credit

*W-Withdrawal

WF-Withdrawal failing

*Any student who withdraws from a class before the completion of the first six weeks of the semester will receive a "W." If he withdraws after the first six weeks of the semester, he may be given a "W" or "WF" at the discretion of the instructor.

An instructor may give an incomplete grade to a student who in the instructor's judgment is unable to complete the work of the course at the time the grade is issued. The work must be completed within two weeks following the close of the same semester, or the grade becomes an "F."

Grade reports are mailed to the parents or guardians of students under twenty-one years old the week following mid-semester if the student is making below "C" in a course. Complete grade reports are mailed at the end of each semester.

Grade points are given according to the grade and the number of semester hours earned: One semester hour with a grade of "A" entitles the student to four grade points; one semester hour with a grade of "B," three grade points; one semester hour with a grade of "C," two grade points and one semester hour with a grade of "D," one grade point. An "F" grade does not earn grade points. A student should maintain a 2.0 grade point average for all work attempted.

REPETITION OF COURSES

A "D" or an "F" course may be repeated only once. The grade earned in the first attempt will be cancelled and the second grade will be used in computing grade-point averages.

A student may not repeat by correspondence or extension study

a course he has failed in resident study.

HONORS AT GRADUATION

Students who complete all requirements for the associate degree with a grade-point average of 3.7, or above, for all hours attempted will receive First Honors; students who complete the requirements with a grade-point average of 3.4 to 3.6, will receive Second Honors; and students who complete the requirements with a grade-point average of 3.0 to 3.3 will receive Third Honors.

QUANTITY AND QUALITY OF WORK REQUIRED

The normal college load is fifteen hours of work in addition to physical education. A student may not register for more than sixteen nor less than twelve semester hours in any semester without the approval of the Dean. An exception to this regulation is made in the case of engineering students who are permitted to carry seventeen or eighteen hours per semester, and music students who are permitted to carry more than sixteen hours per semester.

The Honor Roll is published at the end of each semester. To be eligible for the Honor Roll a student must carry at least twelve semester hours of work, exclusive of physical education, and must average

at least 3.0 grade points on all work attempted.

A student who is not making passing grades in at least 60 per cent of work carried is advised to withdraw at the end of the semester. He may continue on probation for one semester. If he fails to improve his work, he may be suspended for one semester.

CLASS ATTENDANCE

Regular attendance in class and laboratory sessions is an obligation assumed by every student at the time he registers. The college does not maintain a system of excused absenses and an accumulation of absenses will adversely affect the semester grade. A student absent without explanation for two consecutive weeks is dropped from the official rolls and his reinstatement will be subject to the action of the Dean.

Approval to withdraw from a course must be obtained from the Dean. Unauthorized withdrawal from a course or absence from the final examination will result in the failing grade of "WF" for the course.

WITHDRAWALS

A student wishing to withdraw from the College for the remainder of a semester must secure an honorable dismissal through the Dean's office, after he has first returned all books and other equipment charged to him, paid all fines and fees, and cleared himself in every respect with the College office.

A student who fails to comply with the above procedure will not be recommended to any other college or university, nor will he be eligible to receive refunds of such fees or deposits as are by the rules

returnable.

CHANGES IN PROGRAMS

During the first week of each semester a student may petition for a change in program in the office of the Dean. (See Fees for Change in Program).

All changes in schedules must be recorded in the office and any irregularity in procedure may result in an "F" on the record of the student.

CLASSIFICATION OF STUDENTS

A student is classified as a freshman until he completes at least twenty-nine hours.

EXPENSES AND PAYMENTS

All statements as to fees contained in this catalog are by way of announcement only for the school year covered by the catalog. The College reserves the right to change fees at any time without notice being given in advance.

All fees must be paid in full at the time of registration at the opening of each semester or term as a condition of admission to classes. Registration is not complete until all fees are paid.

FULL FEES

A student who enrolls for eight or more semester hours will pay the following fees:

TUITION—Tuition is free to all students who are residents of the Missouri Southern College district. (A student may be asked to present evidence that he is a resident).

Students who are non-residents of the Missouri Southern College district are required to pay a tuition fee of eighty dollars (\$80) per semester. Status of residence is determined by the place of residence of the student's parents or legal guardians.

MATRICULATION—A five dollar (\$5) matriculation fee is charged all students and is payable at the time they enroll in the College for the first time. This fee will not be subject to refund at any time.

REGISTRATION—The registration fee is forty dollars (\$40) per semester.

ACTIVITY—The activity fee is ten dollars (\$10) per semester.

TEXTBOOK RENTAL AND DEPOSIT—All textbooks are owned by the College and are rented to the student. Rental is ten dollars (\$10) per semester and deposit is fifteen dollars (\$15) per semester. The fifteen dollar deposit will be refunded to the student when he returns all books and equipment belonging to the College.

PART FEES

A student who enrolls for less than eight semester hours will pay the following fees:

MATRICULATION—A five dollar (\$5) matriculation fee is charged all students and is payable at the time they enroll in the College for the first time. This fee will not be subject to refund at any time.

ACTIVITY FEE—The Activity Fee is one (\$1) dollar per semester hour for one through seven hours.

REGISTRATION—The Registration fee is five (\$5) dollars per semester hour for one through seven hours.

TUITION—Tuition is free to all students who are residents of the College district.

24

Students who are non-residents of the College district are required to pay a tuition fee of six (\$6) dollars per semester hour for one through seven hours.

TEXTBOOK RENTAL AND DEPOSIT—All textbooks are owned by the College and are rented to the student. Rental is two dollars per course and the Deposit is four dollars per course. The four-dollar Deposit will be refunded to the student when he returns all books and equipment belonging to the College.

OTHER FEES

The following fees are applicable to full-time and part-time students:

APPLIED MUSIC-For one 30-minute lesson per week in applied music, the usual fee is \$32 per semester. It will be paid to the instructor. Receipt for the fee signed by the instructor must be in the hands

of the student before registration is completed.

LABORATORY FEE—A fee of two dollars (\$2) is charged for all laboratory courses. In cases of excessive loss or breakage additional fees may be charged at the end of the semester, but no refund will be made.

FEE FOR LATE REGISTRATION—Every student who enrolls after the registration day of each semester must pay a fee of one dollar (\$1) per semester hour for late registration, in addition to the other fees.

FEE FOR CHANGE OF PROGRAM

With the exception of errors made by the College staff, a fee of one (\$1) dollar must be paid for each petition to change a course after the period allowed for changing programs.

All changes in programs must be approved in advance by the

Dean.

TRANSCRIPT FEE

Each student is entitled to two official transcripts free of charge. For each additional transcript, a fee if \$1 is charged.

REFUND OF FEES

Students leaving school or dropping courses for which they have paid fees, prior to the fifth week of the semester involved, will receive a refund of the fees paid in accordance with the following schedule: Time of Withdrawal Amount of Fee to be Refunded

Within the first and second weeks 80 per cent Within the third and fourth weeks _____ 50 per cent

After the fourth week No Refund

STUDENT ACTIVITIES

Opportunity for participating in a wide variety of out-of-class activities is provided at Missouri Southern College. Students are encouraged to investigate the wide choice of activities and are expected to participate in one or more of these aspects of the college program. The Student Senate

The Student Senate has been vested with limited legislative powers in order that it may implement and promote the objectives of the Student Body Constitution. It is concerned with making arrangements for a great variety of extracurricular activities which serve both the school and the community. As the student body has grown, so have the responsibilities of the Student Senate grown to include such diverse preparations as those required for dances, parades, assemblies, a student directory, charity fund-raising campaigns, etc.

The Student Senate is composed of the Student Body executive officers, who are elected late in each spring term, and the Student Senators, who are elected from the classes by proportional representation early in the fall term. Members of the Student Senate are required to maintain a high level of scholarship as well as to carry out their duties of offices.

The Director of Student Activities of the College and faculty members appointed by the Dean serve as advisors to the Senate. The Senate meets in regular sessions once every week during the school year.

THE STUDENT CABINET—The Student Cabinet, composed of representatives from each authorized student organization, acts in advisory capacity to the Student Body President during the regular school year. In addition to its advisory role, the Student Cabinet functions as a service committee from the end of the spring term until the Senate is organized in the following fall. During the summer months the Cabinet assumes the powers and duties of the Student Senate, thus it is often referred to as "The Summer Cabinet." At the beginning of each new school year the Cabinet helps with the orientation program for new students, and before the body retires to its advisory role, it is responsible for conducting the elections of Class Officers and of Student Senators.

THE COLLEGIATE COUNCIL FOR THE UNITED NATIONS—The Collegiate Council for the United Nations at the College is an affiliate member of the national student organization, which is devoted to building informed student support for the United Nations. The national organization is an accredited Non-Governmental Organization with official NGO status at the United Nations and the United States Mission to the UN. In addition to making known the Charter and the work of the United Nations, it encourages students to reach conclusions about the United States policies which both promote our national interest and make American leadership in the United Nations most effective, and it aims to develop a student public which takes action upon its beliefs.

The Missouri Southern College affiliate to the C.C.U.N. was organized by the Student Senate of 1961-1962, as a Committee of the Senate. At the beginning of the Fall Semester, 1963, a separate sponsor was assigned and the Collegiate Council for the United Nations became a separate college organization with membership continuing to be open to the student body. Its activities, which are in keeping with the purposes of the national organization, have included preparations for the commemoration of United Nations Day in the community and sponsoring a student delegation's participation in the Midwest Model United Nations.

PHI THETA KAPPA

Phi Theta Kappa (Eta Chi Chapter) is a national scholastic fraternity that has as its purpose the promotion of scholarship, the development of character, and cultivation of fellowship among students of both sexes in the junior colleges of the United States. To be eligible for election to membership, a student must: (1) be of good moral character and possess recognized qualities of citizenship as judged by the Administrative Council of the College; (2) have completed at least 15 hours at Missouri Southern College; (3) have a grade-point average of 3.5 at the end of his first semester, or a cumulative average of 3.4 at the end of his second semester, or a cumulative average of 3.3 at the end of his third semester, or a cumulative average of 3.2 at the end of his fourth semester; (4) also be carrying at least 15 hours per week, 12 of which must be in courses leading to a baccalaureate degree, and be in the upper scholastic 10 per cent of the regularly enrolled student body. To maintain active membership, a student must carry at least 15 hours and at the end of any given semester have a grade-point average of not less than 3.0. However, during the last semester of the sophomore year a student may maintain active membership by carrying as few as 12 hours.

Student N.E.A.

The Student National Education Association is the professional association for college students who are preparing to teach. Its members are members of duly chartered local chapters. Local chapters and state student education associations are integral parts of the Student N.E.A. A member of the Student N.E.A. is a student member of the Missouri State Teachers. Association and the National Education Association, with all the rights, privileges, and responsibilities of associate membership in these professional organizations. Members receive the N.E.A. Journal. The Student N.E.A. calendar includes many and varied academic and social activities.

Y. W. C. A.

The Young Women's Christian Association, organized in 1938, endeavors to be of service to the women students of the College. It is a comradeship in which every woman of the College may share and offers an opportunity for development and training in leadership, religion and social service. The activities of the Y.W.C.A. are varied enough for each member to do the type of work that appeals most to her interest. The group is affiliated with the National Student Christian Association and the National Student Y.W.C.A. Each year it contributes to and initiates the all-student World University Service Drive for the relief of students in other countries.

A group of delegates attend the state fall and spring conferences of the Y.W.C.A. and the regional Conference at Estes Park, Colorado,

during the summer.

Engineer's Club

The Engineer's Club is organized for the purpose of fostering a professional spirit and promoting the interests and activities of its members. To accomplish this purpose the Club sponsors technical projects, professional speakers, field trips to industrial plants, etc.

To be eligible for membership a student must be enrolled in

engineering, physical science, or related fields.

THE "MATH" CLUB

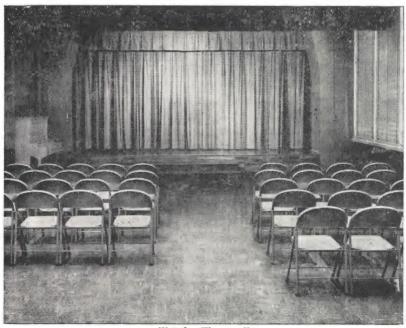
The 'Math' Club is composed of students who are interested in mathematics. Its purpose is to increase students' knowledge in areas of mathematics not covered in regular courses and to interest students in individual study.

THE MODERN LANGUAGE CLUB

The Modern Language Club is open to students of French, Spanish and German. The purpose of this group is to become better acquainted with the languages learned and with the people and countries where these languages are spoken. Some of the contributions to literature, art and music are studied including the ones which are popular today. It has a yearly project in which the Club renders service either here or abroad.

THE COLLEGE PLAYERS

The College Players is organized for the purpose of promoting and stimulating interest in dramatic productions. With this purpose firmly in mind, the members produce four major productions during the school year and contribute materially to college assemblies and other school functions. The organization provides additional opportunities for players outside the college in programs requested by civic, church and business and professional groups. Membership includes not only those who may have met special requirements and shown ability in acting, but students interested in any field of dramatic work, makeup, costume, set design, publicity, management, properties, sound, and stage direction.



"Little Theatre"

Circle K

The Circle K Club was organized in 1955 by the Kiwanis Club of Joplin. The Club is a service organization formed to be of service to both the College and to the community.

Students belonging to this organization are leaders in campus life and are accepted because of their ability and willingness to serve.

Music Activities, see page 65

Young Democrats' Club

The Young Democrats' Club of the College is a student organization whose purpose is to encourage student interest and responsibility in politics. Its programs are designed to inform and to give practical experience in party politics. Any student officially enrolled at Missouri Southern College is eligible for membership.

Young Republicans' Club

The Young Republicans' Club of the College advocates an understanding of party politics as well as an awareness of the responsibilities of the citizen to his country. Any student officially enrolled at Missouri Southern College is eligible for membership.

Athletics

Missouri Southern College is a member of the National Junior College Athletic Association and participates in the following intercollegiate activities: Basketball, Football, Track, Golf and Tennis.

It is the policy of the College to conduct its inter-collegiate athletic program in such a manner so as to create respect for good sportsmanship and an appreciation of sound moral values. At no time will the inter-collegiate athletic program run counter to the main functions of the college which include, in addition to its academic goals, the education of its students in sound practices of democratic citizenship, community responsibility, sound religious and moral values, and an understanding of the rights of other.

The college attempts to build its inter-collegiate program around two major concepts:

- I. The athletic program is an integral part of the educational program of the institution.
- 2. At no time is the inter-collegiate athletic program permitted to dominate the educational philosophy so as to bring discredit to the purpose for which the institution was founded, namely, the education of all students.

To be eligible for participation in contests for the College, students must be doing passing work in at least ten hours, exclusive of physical education.

With the exception of first semeter freshmen, to be eligible for participation in inter-collegiate athletics, students must have met the scholastic requirements of the NJCAA for the previous semester.

The Crossroads

The Crossroads, the school annual, has been published each year since the College was opened. The annual is the product of a student staff with faculty sponsors. It is an honor to be chosen Editor or Co-Editor, or even a member of the Crossroads staff. Every student is urged to have his picture made for the annual, and each organization should respond with group pictures and other pictures of interest.

The Crossroads Ball is the social event of the year, climexed by the crowning of the Crossroads Queen.

The Chart

The Chart staff publishes 12 issues of the College newspaper. Throughout the year the editorial division uses the work of many reporters, feature writers, cartoonists, photographers, and typists. The business staff offers experience in advertising, salesmanship and secretarial practices. Students interested in an editorial position should register for the Survey of Journalism course. Those wishing to free-lance should attend weekly staff meetings.

The Student Handbook

The Student Handbook, a compilation of information about the College, is sponsored by the Student Cabinet of the Student Senate.

The Student Directory

The Student Directory is compiled by the Student Senate and is published annually.

SECTION 2

This section contains suggested programs of study to guide the students in the selection of courses. The programs have been carefully planned and students should follow them as closely as possible. All electives should be chosen in conference with an instructor.

Schedules of courses offered during the 1966-1967 session will be published as separate bulletins.

AGRICULTURE CURRICULUM

Degree. Associate in Arts

Courses required for the Agriculture Curriculum:

English I and 2 6 semester	hours
Speech 3 semester	hours
Chemistry 5 semester	hours
General Botany or Zoology 5 semester	
General Economics 5 semester	hours
Government or American History 5 semester	hours
Algebra 3 semester	hours
Exposition	hours
Accounting 3 semester	hours
General Psychology	hours
General Sociology	hours
Electives	hours
Physical Education	hours

2. Suggested order of study:

FRESHMAN YEAR

First Semester	Second Semester
English 1 3 hours Chemistry 5 hours Psychology 3 hours American History 5 hours	English 2 3 hours Chemistry 2 3 hours Algebra 3 and Elective or Algebra and Trigonometry
Physical Education 1 hour	5 hours 5 ho
	18

First Semester			Second Semester		
Exposition Zoology Accounting 1 U. S. Government Elective	5 3 3	hours hours	Botany Economics State Government Electives	5 2	hours hours
-			-		

NURSING CURRICULUM

Degree: Associate in Arts

1. Courses required for the Nursing Curriculum:

English I and 2			
Speech 3			
English Literature 6	5	semester	hours
Chemistry	3	semester	hours
Zoology 5	,	semester	hours
General Sociology	3	semester	hours
General Psychology 3			
U. S. and State Government			
or American History	5	semester	hours
Psychology of Personal Adjustment :	3	semester	hours
Electives in Arts and			
Science Courses 20		semester	hours
Physical Education	2	semester	hours

2. Suggested order of study:

FRESHMAN YEAR

First Semester	Second Semester
English 1 3 hours Chemistry 1 5 hours General Psychology 3 hours	English 2 3 hours Chemistry 2 3 hours U. S. and State Government
American History or Electives 5 hours Physical Education 1 hour	or Electives 5 hours Speech 3 hours Electives 2 hours Physical Education 1 hour
17	17

First Semester	Second Semester
Zoology 5 hours English Literature 3 hours General Sociology 3 hours Electives 5 hours	Anatomy and Physiology 5 hours English Literature 3 hours Psyh. of Pers. Adjust 3 hours Electives 5 hours
16	16

ARTS AND SCIENCE CURRICULUM

Degree: Associate in Arts

1. Courses required for the Arts and Science Curriculum:

English I and 2		semester semester	
	3	semester	hours
Mathematics	3	semester	hours
Fine Arts Appreciation or			
Foreign Language	5	semester	hours
Biological Science	5	semester	hours
Fundamentals of Physical Science,			
Chemistry or Physics	5	semester	hours
American History or Government	5	semester	hours
Economics	5	semester	hours
General Psychology	3	semester	hours
Electives	9	semester	hours
Physical Education	2	semester	hours

2. Suggested order of study:

FRESHMAN YEAR

First Semester		Second Semester
English 1 Foreign Language or Fine	3 hours	English 2 3 hours
Arts Appreciation American History or	5 hours	Foreign Language or Fine Arts Appreciation 5 or 6 hours
Government	5 hours	General Psychology 3 hours
Speech	3 hours	Electives 2 hours
Physical Education	1 hour	Physical Education l hour
-		-
	17	17 or 18

First Semester	Second Semester
Foreign Language or Fine Arts Apprec. 5 or 6 hours Science 5 hours Government or American History 5 hours Elective 2 hours	Economics 5 hours Science 5 hours Literature 3 hours Elective 4 hours
17 or 18	17

BUSINESS ADMINISTRATION CURRICULUM

Degree: Associate in Arts

1. Courses required in the Business Administration Curriculum:

English I and 2	3 3 5 6 5 5	semester semester semester semester semester semester	hours hours hours hours hours hours
Foreign Language			
Biological Science			
Business Organization and Management	3	semester	hours
Fundamentals of Physical Science,			
Chemistry or Physics	5	semester	hours
Psychology	3	semester	hours
Electives	5	semester	hours
Physical Education			

2. Suggested order of study:

FRESHMAN YEAR

First Semester	Second Semester
English 1 3 hours Accounting 1 3 hours Fine Arts Appreciation, Foreign Language, or	English 2 3 hours Accounting 11 3 hours Fine Arts Appreciation, Foreign Language, or
American History 6 or 5 hours Science 5 hours Physical Education 1 hour	American History 6 or 5 hours Algebra 3 or Algebra & Trigonometry 5 hours Physical Education 1 hour
18 or 17	18 or 17

First Semester		Second Semester
Accounting 123	hours	Accounting 23 3 hours
U.S. and State Government		Economics 5 hours
or Science5	hours	U. S. and State Government
Psychology 3		or Science 5 hours
Speech 3	hours	Literature 3 hours
Business Organization		
and Management3	hours	
	-	

GENERAL BUSINESS CURRICULUM

Degree: Associate in Business

Courses required for the General Business Curriculum: 1.

English I	r hours r hours r hours r hours r hours r hours r hours r hours r hours
or American History 5 semester **Electives 18 or 0 semester Physical Education 2 semester	r hours

*A student may specialize in Shorthand or Accounting, or both, but in any case will take one course in Accounting.

**Electives should include General Psychology, Literature, Geography, Economics, Science, Introduction to Business, Office Machines.

2. Suggested order of study:

FRESHMAN YEAR

First Semester		Second Semester
English Shorthand 3 or 13 Accounting 1 Business Arithmetic Typewriting (5 or 15) Physical Education	3 hours 3 hours 3 hours 1 hour	Business Communications 3 hours Shorthand 4 or 33
	16	16

	SOPHOMORE	YEAR	
First Semester		Second Semester	
Typewriting 15 Accounting 12 Introduction to Business State Government	3 hours 3 hours 3 hours 4 hours 5 hours 7 hours 8 hours 9 hours	U. S. Government Speech Typewriting 16 Accounting 23 or Shorthand 33 Business Law Secretarial Procedures	3 hours 3 hours 3 hours 3 hours
-	17	-	1.0

GENERAL BUSINESS CURRICULUM (One Year)

Degree: Certificate

1. Courses required for the one-year General Business Curriculum:

English I	3	semester	hours
Speech 3 or	6	semester	hours
Business Communications or English 2	3	semester	hours
Shorthand (Must be courses 13 and 33)	6	semester	hours
Typewriting (Must be courses 15 and 16)	6	semester	hours
Accounting			
Introduction to Business	3	semester	hours
Office Machines	3	semester	hours
*Electives	3	semester	hours
Physical Education	-	semester	hour

^{*}Electives should be chosen from: General Phychology, Literature, Business Arithmetic.

2. Suggested order of study:

First	Came		4
rirsi	Sem	es	ıeı

English 1 3 1 Shorthand 13 3 1 Typewriting 15 3 1 Accounting 1 or Elective 3 1 Introduction to Business 3 1 Physical Education 1
--

Second Semester

Business Com Speech Shorthand 33 Typewriting 1	3	hours
Accounting 1 Office Machin	 3	hours

18

16

DENTAL CURRICULUM

Degree: Associate in Arts

I. Courses required for the Dental Curriculum:

English I and 2	6	semester	hours
Speech	3	semester	hours
Chemestry	8	semester	hours
Zoology	5	semester	hours
Anatomy and Physiology	5	semester	hours
Physics	8	semester	hours
American History or Government			
Electives)	semester	hours
Physical Education	2	semester	hours

2. Suggested order of study:

FRESHMAN YEAR

		FRESHMAN	YEAR		
First Semester			Second Semester		
Chemistry 1 Zoology Algebra &			Chemistry 2 Anatomy & Physiology Qualitative Analysis	5	hours
TrigonometryPhysical Education			American History Physical Education	5	hours
-]	16			17
		SOPHOMORE	YEAR		
	5 3 3	hours hours	Second Semester English 2 Physics 2 Economics Literature Speech	3 5 3	hours hours
]	16			17

ENGINEERING CURRICULUM

Degree: Associate in Science

1. Courses required for the Engineering Curriculum:*

English I and 2 6 semester Speech 3 semester	
Literature	
American History or U. S. and	
State Government 5 semester	
Mathematics 14, 15 and 16 15 semester	hours
Chemistry I and 2 8 semester	hours
Engineering Drawing I 2 semester	hours
**Descriptive Geometry	hours
Physics 3 and 4 10 semester	hours
**Electives	hours
Physical Education	hours

^{*}The admission requirements for this curriculum must include four units in mathematics and one unit in science with laboratory.

2. Suggested order of study:

FRESHMAN YEAR

First Semester English 1 3 *Mathematics 14 5 Engineering Drawing 2 Slide Rule 1 Chemistry 1 5 Physical Education 1	hours hours hour hour hours	Second Semester English 2
	17	19 or 20

First Semester Mathematics 16	5 hours	Second Seme Mathematics 17 Statics Speech Modern Physics ***Electives	3 hours 5 hours 1 hours 2 hours
English Literature	18		19

^{*}Students who do not qualify for Mathematics 14 will be one semester behind this schedule in both Mathematics and Physics.

^{**}Not required of Chemical Engineers.

^{***}Electives should be selected in accord with the requirements of the curriculum of the College to which the student will transfer.

^{**}Students electing to take Qualitative Analysis must wait until the sophomore year to take Physics 3.

^{***}Chemistry majors must choose U. S. and State Government or American History for elective.

GENERAL CULTURE CURRICULUM

Degree: Associate in Arts Associate in Science

1. Courses required for the General Culture Curriculum:

English I and 2	semester	hours
Speech	semester	hours
United States and State Government		
or American History 5	semester	hours
Electives	semester	hours
Physical Education2	comector	hours

2. The General Culture Curriculum is planned to give the student maximum flexibility in planning his junior college program.

Sixty per cent of the total hours presented for graduation must be from work acceptable in the Arts and Science curriculum.



A fully equipped library is at the disposal of the student.

JOURNALISM CURRICULUM

Includes preparation for Editorial, Advertising, Publishing, and non-technical Radio Curriculums.

Degree: Associate in Arts

1. Courses required for the Journalism Curriculum:*

English I and 2	6	semester	hours
Foreign Language (in 1 Language)	13	semester	hours
Biological Science or Physical Science	5	semester	hours
Economics	5	semester	louis
Curvey of I1:	5	semester	hours
Survey of Journalism	- 1	semester	hour
U. S. Government	3	semester	hours
English Literature	6	semester	hours
American History	5	semester	hours
**Electives in Arts and Science Courses	15	semester	hours
Physical Education	2	semester	hours

^{*}One unit of Typewriting should be included in the high school credits.

2. Suggested order of study:

FRESHMAN YEAR

First Semester English 1 3 Foreign Language 5 or Electives 5 Science or Electives 5 Survey of Journalism 1 Electives 2 Physical Education 1	hours hour hour	Second Semester English 2 Foreign Language Science or Electives Survey of Journalism and Electives Physical Education	5 5 3	hours hours
	17]	7

SOPHOMORE YEAR

First Semester Foreign Language or Electives 5 U. S. Government 3 English Literature 3 American History 5	hours hours	Second Semester Foreign Language and/or Electives Speech Economics English Literature Survey of Journalism	5 3 5 3	hours
	16	-	1	17

NOTE: A student following this curriculum is expected to work on the school newspaper, THE CHART.

^{**}Electives should be chosen from Sociology, General Psychology, Mathematics, Exposition, Accounting.

LAW CURRICULUM

Degree: Associate in Arts

1. Courses required for the Law Curriculum:

English I and 2	5 sei	mester	hours
Public Speaking	ser	nester	hours
Science	ser	nester	hours
Mathematics	ser	mester	hours
American History	ser	mester	hours
United States and State Government 5	ser	mester	hours
Accounting 3	sen	nester	hours
Psychology or Sociology 3	sen	nester	hours
Foreign Language 10	sen	nester	hours
Electives17	ser	nester	hours
Physical Education	2 ser	mester	hours

2. Suggested order of study:

FRESHMAN YEAR

First Semester			Second Semester		
English 1 3 Foreign Language or American History 5 Government 3 Science 5 Physical Education 1	5 3 5	hours hours	English 2 Foreign Language Algebra 3 or Algebra and Trigonometry Psychology or Sociology Physical Education	5 5 3	hours
	1	7			17
	-	SOPHOMORE	YEAR		

First Semester		Second Semester
Exposition 3 Accounting 1 3 Foreign Language or		Economics 5 hours Modern European History or English Literature 3 hours
American History 5 Modern European History	hours	Public Speaking
or English Literature 3 Government2	hours hours	
Control of the Contro		C

MEDICAL CURRICULUM

Degree: Associate in Arts

1. Courses required for the Medical Curriculum:

English I and 2 6	semester	hours
Speech3	semester	hours
*Foreign Language (in I Language) 10		
Chemistry 8	semester	hours
Qualitative Analysis	semester	hours
Anatomy and Physiology 5		
Physics 8	semester	hours
American History or Government 5		
Electives10	semester	hours
Physical Education2	semester	hours

^{*}Not required if the particular school our candidate plans to attend does not require a foreign language.

2. Suggested order of study:

FRESHMAN YEAR

First Semester	Second Semester
Chemistry 1 5 hours Zoology 5 hours Algebra and	Chemistry 2
Trigonometry 5 hours Physical Education 1 hour	Foreign Language or American History 5 hours Physical Education 1 hour
16	17

First Semester	Second Semester
English 1 3 hours Foreign Language 5 hours Physics 1 5 hours	English 2 3 hours Speech 3 hours Foreign Language or
Quantitative Analysis 5 hours	American History 5 hours Physics 2 3 hours Psychology or
18	English Literature 3 hours

MEDICAL TECHNOLOGIST CURRICULUM

Degree: Associate in Science

1. Courses required for the Medical Technologist Curriculum:

English I and 2	6	semester	hours
Speech	3	semester	hours
Chemistry	8	semester	hours
Quantitative Analysis		semester	hours
Qualitative Analysis	3	semester	hours
Zoology	5	semester	hours
Botany	5	semester	hours
American History or U.S. and State			
Government	5	semester	hours
Anatomy and Physiology	5	semester	hours
Electives	18	semester	hours
Physical Eduation	2	semester	hours
(The student should have satisfactorily comp typewriting in high school).	let	ed a cou	rse in

2. Suggested order of study:

FRESHMAN YEAR

First Semester	Second Semester
English 1 3 hours Chemistry 1 5 hours Algebra 3 hours General Psychology 3 hours Elective 2 hours Physical Education 1 hour	English 2 3 hours Chemistry 2 3 hours Qualitative Analysis 3 hours Botany 5 hours Speech 3 hours Physical Education 1 hour
17	18

First Semester	Second Semester
Quantitative Analysis 5 hours Zoology 5 hours Physics 5 hours	Anattomy & Physiology 5 hours Physics 2 3 hours Art Appreciation 3 hours American History or Government 5 hours
15	16

MUSIC CURRICULUM

Degree: Associate in Arts

I. Courses required in the Music Curriculum:

English I and 2	6	semester semester	hours hours
English Literature	6	semester	hours
Music Theory	6	semester	hours
Music Literature	. 6	semester	hours
American History or U. S. and			
State Government	_	semester	
Vocal Techniques		semester	
Keyboard Techniques	4	semester	hours
Applied Music 5 (Major Area)	4	semester	hours
Applied Music 6 (Minor Area)	2	semester	hours
Modern Mathematics	3	semester	hours
Fundamentals of Physical Science		semester	
*Electives		semester	
Physical Education	2	semester	hours

^{*} Electives should be chosen from Psychology and Foreign Language.

2. General Information

APPLIED MUSIC

A. Private instruction may be arranged for piano, voice and most orchestral instruments. Two thirty-minute lessons (or one sixty-minute lesson) is required for a major area of performance, and one thirty-minute lesson is required for a minor area performance. Wind, string and voice majors are advised to minor in piano.

Practice rooms are available at no cost to the student, but are reserved for students under the applied music program.

B. In the Vocal Music Department, Choir and Vocal Ensemble are open to all students with the consent of the director. One hour of elective credit per semester is allowed for each activity.

In the Instrumental Music Department, Concert Band and Stage Band are open to all students with the consent of the director. One hour of elective credit per semester is allowed for each activity.

Music majors are expected to participate in at least one vocal and instrumental ensemble. A maximum of eight hours is allowed for music activities during the four semesters.

- C. RECITAL REQUIREMENTS: All music majors are expected to attend student and faculty recitals. Music majors are to appear on a minimum of two recitals each semester and to give a graduation recital during the final semester of approximately forty-five minutes length.
 - D. SCHOLARSHIPS: A limited number of scholarships are avail-

able to music majors. The scholarships are granted on the basis of musicianship, scholarship, and need, and are renewable. Application may be made to the Scholarship Committee, Missouri Southern College, and will be subject to the approval of the music department of the College.

2. Suggested order of study:

FRESHMAN YEAR

First Semester	Second Semester
English 1 3 hours Elem. Music Theory 5 hours Modern Mathematics 3 hours	English 2 3 hours Elem. Music Theory 5 hours Fund. of Physical
Gen Psychology 3 hours Vocal Techniques 1 hour Music 5 (Major) 1 hour Music 6 (Minor) ½ hour Physical Education 1 hour	Science 5 hours Vocal Techniques 1 hour Music 5 (Major) 1 hour Music 6 (Minor) ½ hour Physical Education 1 hour
17½	16½

First Semester	Second Semester
English Literature 3 hours Adv. Music Theory 3 hours Music Literature 3 hours Speech 3 hours Keyboard Techniques 1 hour Music 5 (Major) 1 hour Music 6 (Minor) ½ hour Elective 5 hours	English Literature 3 hours Adv. Music Theory 3 hours Music Literature 3 hours American History 5 hours Keyboard Techniques 1 hour Music 5 (Major) 1 hour Music 6 (Minor) ½ hour Recital Required
191/2	16½

OPTOMETRY CURRICULUM

Degree: Associate in Arts

1. Courses required for the Optometry Curriculum:

English I and 2	3	semester	hours
Speech	3	semester	hours
English Literature	3	semester	hours
Algebra and Trigonometry	5	semester	hours
U. S. and State Government			
or American History	5	semester	hours
Zoology	5	semester	hours
Chemistry	8	semester	hours
Physics	8	semester	hours
General Psychology	3	semester	hours
Electives	7	semester	hours
Physical Education	2	semester	hours

Suggested Electives: Child Physchology; English Literature; European History; U. S. Government; Economics.

2. Suggested order of study:

FRESHMAN YEAR

First Semester	Second Semester
English 1 3 hours Algebra & Trigonometry 5 hours Chemistry 5 hours General Psychology 3 hours Physical Education 1 hour	English 2 3 hours Chemistry 3 hours American History 5 hours Electives 5 hours Physical Education 1 hour
17	17

First Semester		Second Semester
English Literature Physics 1 Zoology Speech Electives	5 hours 5 hours 3 hours	U. S. and State Government 5 hours Sociology 3 hours Physics 2 3 hours Electives 5 hours
	18	16

PHARMACY CURRICULUM

Degree: Associate in Arts

1. Courses required for the Pharmacy Curriculum:

English I and 2	6	semester	hours
Speech	3	semester	hours
Algebra and Trigonometry	5	semester	hours
American History or Government	5	semester	hours
Zoology	5	semester	hours
Chemistry	8	semester	hours
Physics	8	semester	hours
Accounting	3	semester	hours
Botany	5	semester	hours
The state of the s	3	semester	hours
Quantitative Analysis	5	semester	hours
Economics	5	semester	hours
Electives	1	semester	hour
Physical Education	2	semester	hours

2. Suggester order of study:

FRESHMAN YEAR

First Semester	Second Semester
Algebra & Trigonometry 5 hours Chemistry 5 hours Zoology 5 hours Physical Education 1 hour	American History 5 hours Chemistry 3 hours Qualitative Analysis 3 hours Botany 5 hours Physical Education 1 hour
16	17

First Semester		Second Semester
English 1	5 hours 5 hours	English 2 3 hours Economics 5 hours Physics 2 3 hours Speech 3 hours Electives 2 hours
-	16	16

17

PHYSICAL EDUCATION CURRICULUM

Degree: Associate in Arts

1. Courses required for the Physical Education Curriculum:

English I and 2 6 semester hou	rc
Speech 3 semester hou	
Mathematics 3 semester hou	rs
Literature 3 semester hiu	rs
Science 10 semester hou	rs
Hygiene 3 semester hou	rs
American History 5 semester hou	
U. S. and State Government 5 semester hou	rs
Recreational Activities	rs
Problems in Intramural Sports	
Electives 16 semester hou	
Physical Education 2 semester hou	
Electives should be chosen from General Psychology, Education	

Psychology, Rules and Officiating, Art Appreciation, Music Masterpieces and Scouting and Boys' Work.

2. Suggested order of study:

FRESHMAN YEAR

First Semester			Second Semester		
English 1	3	hours	English 2		hours
Physical Science	5	hours	American History or		
General Psychology Problems in Intramural	3	hours	Physical Science Recreational Activitier		
Sports	3	hours	Mathematics	3	hours
Hygiene			Physical Education	1	hour
Physical Education	1	hour			
First Semester		SOPHOMORE	YEAR Second Semester		18
a and thousands			become bemester		
Zoology	3 2 3	hours hours	Anatomy and Physiology Speech Music Masterpieces Scouting and Boys' Work Educational Psychology State Government	3 2 2 3	hours hours hours

16

PHYSICAL THERAPY CURRICULUM

Degree: Associate in Arts

1. Courses required for the Physical Therapy Curriculum:

English I and 2			
Speech 3 or	6	semester	hours
English Literature	3	semester	hours
General Biology	5	semester	hours
General Zoology	5	semester	hours
Chemistry	5	semester	hours
Elementary College Physics	5	semester	hours
Mathematics	3	semester	hours
Sociology	6	semester	hours
American History	5	semester	hours
Psychology	9	semester	hours
Electives 7 or	4	semester	hours
Physical Education	2	semester	hours

2. Suggested order of study:

FRESHMAN YEAR

First Semester		Second Semester		
English 3 Chemistry 5 Mathematics 3 General Psychology 3 Physical Education 1	hours hours	English General Biology American History Sociology Physical Education	5 5 3	hours hours
	15			17

First Semester		Second Semester	
College Physics 5 General Zoology 5 Child Psychology 3 Hygiene 3	5 hours 3 hours	English Literature Speech The Family Psychology of Personal Adj. U. S. and State Govern-	3 hours 3 hours
		ment	5 hours
		B	
	16		17

SOCIAL WORK CURRICULUM

Degree: Associate in Arts

1. Courses required for the Social Work Curriculum:

English I and 2	6	semester	hours
Speech	3	semester	hours
		semester	
Biological Science	5	semester	hours
Economics	5	semester	hours
	5	semester	hours
Psychology	3	semester	hours
Sociology	3	semester	hours
American History	5	semester	hours
Electives in Arts and Science Courses	24	semester	hours
Physical Education	2	semester	hours

2. Suggested order of study:

FRESHMAN YEAR

First Semester			Second Semester		
English 1 Science or Elective Sociology	5	hours	English 2 Science or Elective U. S. and State		
American History Physical Education			Government Speech Physical Education	3	hours
© and the second second		17			17

First Semester	Second Semester
Literature 3 or 11 2-3 hours Psychology 3 hours Electives 10 hours	Economics 5 hours Literature 4 or 12 2-3 hours Electives 8 hours
15 or 16	15 or 16

ELEMENTARY EDUCATION CURRICULUM

Degree: Associate in Arts

1. Courses required for the Elementary Education Curriculum:

English I and 2	6	semester	hours
English Literature			
Speech	3	semester	hours
American History			
U. S., and State Government		semester	hours
Biological Science	5	semester	hours
Physical Science, Chemistry or Physics	5	semester	hours
General Psychology	3	semester	hours
Geography	3	semester	hours
Child Psychology			
Electives			
Physical Education	2	semester	hours

2. Suggested order of study:

FRESHMAN YEAR

First Semester		Second Semester	
English 1		English 2 ———————————————————————————————————	
Physical Science or American History 5	hours	Physical Science *Music Masterpieces	
General Psychology 3 Geography 3		*Music Fundamentals	3 hours
Physical Education1		Physical Education	
	18	• · · · · · · · · · · · · · · · · · · ·	17

^{*}Not required if student has good background in Music Recommended elective — Art Appreciation.

First Semester		Second Semester		
English Literature 3 Biological Science or	hours	English Literature	3	hours
Government5	hours	Biological Science	5	hours
Art Education 3	hours	Educational Psychology		
Public School Music 2	hours	Children's Literature	2	hours
Child Psychology 3	hours	Hygiene		
	_			_
	17		1	6

SECONDARY EDUCATION CURRICULUM

Degree: Associate in Arts Associate in Science

1. Courses required for the Secondary Education Curriculum:

English I and 2		6	semester	hours
Speech		3	semester	hours
Literature		. 6	semester	hours
Mathematics	or	5	semester	hours
Fine Arts Appreciation	or	3	semester	hours
Biological Science		5	semester	hours
Fundamentals of Physical Science.				
Chemistry or Physics		5	semester	hours
American History and Government				
or Economics		10	semester	hours
General Psychology		3	semester	hours
Adolescent Psychology		. 3	semester	hours
Electives		14	semester	hours
Physical Education		2	semester	hours

2. Suggested order of study:

FRESHMAN YEAR

First Semester	Second Semester
English 1	nours Science 5 hours nours Mathemathics or History 5 hours nours Speech 3 hours
17	17

First Semester		Second Semester		
English Literature 3 Fine Arts Appreciation 3	hours	English Literature	3	hours
Adolescent Psychology 3 Electives 7		or Economics Educational Psychology Electives	3	hours
		B-1000		
1	16		1	6

SECTION 3

EXPLANATION

Definition of Semester Hours: The hour, which is the unit of credit given in the College, is the equivalent of a subject pursued one period per week for one semester. Thus, a course valued at two semester hours' credit will normally meet two hours per week for one semester.

Course Numbers: Each course has been given a number which follows the name of the course. The small letters indicate the semester or semesters in which the course is usually offered: "f" designates a course offered in the fall semester; "w," the winter semester.

Technical Education Courses: See Section 4.

ARTS AND SCIENCE

I. ENGLISH AND SPEECH

a. English

English I (f and w). A study of the principles of effective writing based largely upon expository prose models. Students who show exceptional ability may be permitted to substitute English 7a for the English I requirement. 3 hours.

English 2 (f and w). Prerequisite, English I or 7a. A course that develops reading comprehension through an introduction to types of literature and offers practice in expository writing. 3 hours.

English 7a (f). A special composition course for freshmen who demonstrate exceptional proficiency in the mechanics and effectiveness of expression in English. 3 hours.

Exposition 7 (f). Prerequisite, English I or 7a and 2, or their equivalent. A study of the techniques of factual writing and the writing of non-fiction. Recommended for all students, especially for those entering professional schools. 3 hours.

Survey of Journalism 14 (f and w). No prerequisite. Open to freshmen and sophomores who want an opportunity to try various types of work in the field of journalism and who want to become active on the staff of the college paper. I hour.

Survey of Journalism 15 (f and w). Prerequisite, Survey of Journalism 14. Open to freshmen and sophomores. I hour.

Masterpieces of Literature 3 (f). No prequisite. World literature with emphasis upon the early years. 2 hours.

Masterpieces of Literature 4 (w). No prerequisite. World literature, other than English, with emphasis upon the last three centuries and representative writers of the Eastern world. 2 hours.

English Literature II (f). Prerequisite, sophomore standing. A survey in English literature from Beowulf to the Romantic Movement. 3 hours.

English Literature 12 (w). Prerequisite, sophomore standing. A survey course in English literature from the Romantic Movement to the present. 3 hours.

Children's Literature 13 (w). Prerequisite, English I. A reading, lecture and observation course for elementary education students, including evaluation of children's literature, its historical development and its use in elementary schools. 2 hours.

b. Speech

Speech Techniques 5 (f and w). Prerequisite English I or 7a. A practical course designed to improve or to develop self-expression. Emphasis is placed on development of principles of effective oral communications. 3 hours.

Introduction to the Theatre 6 (f). Survey course in theatre history, stressing the contributions of playwrights, actors and social trends of all periods as contributing factors to the contemporary theatre. 3 hours.

Dramatic Interpretation 7 (f). The study and application of the principles and techniques of oral reading. The course includes an analysis of different types of prose and poetry for platform presentation. 3 hours.

Play Production 9 (w). A course dealing with the techniques and problems of mounting a play. The course includes a basic analysis of the construction of the drama, along with the basic elements of costume, stagecraft and make-up. 3 hours.

Beginning Acting II (f). A basic course in acting: character analysis and the creation of a role; stage movement and basic techniques. Attention given to individual and group rehearsals. Laboratory work includes taking part in some phase of the major production. 3 hours

Beginning Directing 13 (w). Basic principles, skills, and techniques involved in the drection of plays. An analysis and study with practical demonstrations and class exercises of these fundamental principles of play directing. 3 hours.

Public Speaking 15 (f and w). Prerequisite, English 2 and Speech Techniques 5 or the approval of the instructor. Practice in preparation and delivery of impromptu and extemporaneous speaking. 3 hours.

Voice and Articulation 16 (f and w). Techniques for improving the speaking voice. Attention to phonetics, articulation, pronunciation and general expression. 3 hours.

Stagecraft (f and w). A laboratory and whenever possible, lecture course devoted to the mounting of the major productions. The course may be repeated for accumulation of 4 hours. I hour.

2. FOREIGN LANGUAGE

a. French

Elementary French I (f or w). (Students who have had only one unit of French in high school should take the elementary course). Conversation practice and vocabulary building. Pronunciation proficiency, essentials of grammar. Graded readings. 5 hours.

Intermediate French 2 (f or w). Prerequisite, Elementary French I, or two units of high school French. Special emphasis on conversation and vocabulary building. Reading of stories and plays. 5 hours.

Advanced French 3 (f or w). Prerequisite, Intermediate French 2, or three or four units of high school French. Advanced conversation and reading. Individual reading and reports. 3 hours.

b. German

Elementary German I (f or w). (Students who have had only one unit of German in high school should take the elementary course). Intensive practice in conversation to further proficiency in speaking the language. Vocabulary building and writing. Brief study of the essentials of grammar. 5 hours.

Intermediate German 2 (f or w). Prerequisite, Elementary German I, or two years of high school German. Emphasis on the spoken idiom. Reading of stories and plays. Individual reading and reports. 5 hours.

Advanced German 3 (f or w). Prerequisite, Intermediate German 2, or three or four units of high school German. Advanced conversation and reading. Individual reading and reports. 3 hours.

c. Spanish

Elementary Spanish I (f or w). (Students who have had only one unit of Spanish in high school should take the elementary course). Conversation and vocabularly building are most important in the course. Pronunciation proficiency and grammar essentials. 5 hours.

Intermediate Spanish 2 (f or w). Prerequisite, Elementary Spanish I, or two units of high school Spanish. Conversation is stressed. Intermediate reading and composition. 5 hours.

Advance Spanish 3 (f or w). Prerequisite, Intermediate Spanish 2, or three or four years of high school Spanish. Conversation is stressed. Rapid reading of Spanish Masterpieces. Individual reading and reports. 3 hours.

3. MATHEMATICS

Algebra I (f or w). A basic course for students who are deficient in mathematics. No credit for students who have one or more units of high school algebra. 3 hours.

Trigonometry 2 (f or w). Prerequisite, one and one-half units of high school algebra, Algebra I or College Algebra 3. Study of trigonometric functions and their applications. (Two hours' credit for students offering trigonometry for entrance). 3 hours.

College Algebra 3 (f or w). Prerequisite, One and one-half units in high school algebra, Algebra I or Modern Mathematics 6. A course for students who do not expect to major in mathematics, engineering, or natural sciences. 3 hours.

Algebra and Trigonometry 5 (f and w). Prerequisite, satisfactory score on departmental placement test and three units in high school

mathematics. Students not meeting these requirements must earn a grade of "C" in Algebra I, or 3, or Modern Mathematics 6, or have the consent of the instructor before enrolling. (Many Colleges of Engineering do not allow credit for the course, Algebra and Trigonometry). 5 hours.

Modern Mathematics 6 (f and w). Prerequisite, one year of high school mathematics or consent of the instructor. Basic elements of set theory and mathematical logic with applications to algebra and geometry. Also, a survey of several modern topics. 3 hours.

Statistics 7 (w). Prerequisite, College Algebra 3 or equivalent. Introduction to the basic concepts of statistical inference and to the methods of statistical analysis. 3 hours.

Slide Rule 8 (f and w). Prerequisite, trigonometry or concurrent registration in trigonometry. A laboratory course in the use of a log-log rule. A student may be excused if he passes a proficiency test. Meets two hours a week. I hour.

Analytic Geometry and Calculus 14 (f or w). Prerequisite, Algebra and Trigonometry. 5, with a grade of "C," or four units of high school mathematics and a satisfactory score on departmental placement test. Differentiation and integration of algebraic functions. Conic sections. 5 hours.

Analytic Geometry and Calculus 15 (f or w). Prerequisite, Analytic Geometry and Calculus 14 with a grade of "C." Differentiation and integration of transcendental functions, polar coordinates, vectors, and applications. 5 hours.

Analytic Geometry and Calculus 16 (f or w). Prerequisite, Analytic Geometry and Calculus 15. Solid analytic geometry, infinite series, partial differentiation, and multiple integrals. 5 hours.

Differential Equations 17 (w). Prerequisite, Analytic Geometry and Calculus 16, or concurrent registration. Standard types of ordinary equations of the first and second order, linear equations with constant coefficients, and applications to geometry and physical science. 3 hrs.

Selected Topics in Mathematics 20 (w). Prerequisite, Analytic Geometry and Calculus 14. A course to enrich the student's knowledge and promote his interest in various areas of mathematics, especially in the area of modern mathematics. Required of mathematics majors. I hour,

4. ENGINEERING

Engineering Drawing I. (f). Study of use of drawing instruments, lettering, technical sketching, tracing and blue printing. A. S. A. standards are basis for drafting conventions. 2 hours.

Descriptive Geometry 2 (w). Prerequisite, Engineering Drawing 1. Practical applications of principals to problems of geology and mining, and mechanical and architectural engineering. 2 hours.

Engineering Drawing 3. (w). Prerequisite, Engineering Drawing 1. Screw thread, bolts and nuts, detail and assembly, gear and cam design, topographical and pattern drafting. 2 hours.

Architectual Drawing 4 (w). Prerequisite, Engineering Drawing I. The fundamental principles of house planning, including materials of construction and room arrangements. Plans will be drawn of some suitable building. 2 hours.

Plane Surveying 9 ((f and w). Prerequisite, trigonometry. An introductory course. A study of adjustment and use of surveyor's compass, levels, plane table and alidade, and transit. Field work in chaining, profile and differential leveling, traverse, land survey, etc. 2 hours.

Fundamentals of Electrical Engineering 11 (f or w). Prequisite, General College Physics 4, or should be taken concurrently. D. C. networks; branch currents, loop currents and nodal methods; Norton's and Thevenin's theorems; simple magnetic circuits; inductance; capacitance. Three lecture hours per week. 3 hours.

Statics 13 (w). Prerequisites, Physics 3 and concurrent registration in Analytic Geometry and Calculus 16. The principles of mechanics as applied to problems of engineering in which the structures under consideration are in static equilibrim. 3 hours.

5. PSYCHOLOGY

General Psychology I (f and w). Principles which control individual human behavior. Prerequisite for all other courses in psychology. 3 hours.

Child Psychology 3 (f). Prerequisite, General Psychology I. Consideration of theories, principles, and characteristics associated with the mental and physical growth of the child. Stury to include relationship with others with emphasis on the ways in which fundamental needs may be met in daily living. 3 hours.

Adolescent Psychology 4 (f). Prerequisite, General Psychology I. The development, behavior, special problems and characteristics of the pre-adolescent and adolescent with study given for proper guidance. 3 hours.

Educational Psychology 5 (w). Prerequisite, General Psychology I. A general course designed to acquaint the student with some of the scientific psychological trends. Principles for developing and improv-

ing the teaching-learning processes receive special consideration. Open to fourth-semester education majors only. 3 hours.

The Psychology of Personal Adjustment 6 (f). Prerequisite, General Psychology I, or the consent of the instructor. Emphasis on certain psychological principles that, if applied, would result in optimum emotional maturity. 3 hours.

Abnormal Psychology 7 (w). Prerequisite, General Psychology I and approval of the instructor. Introduction to the study of abnormal behavior including attention to causes, psychodynamic factors, patterns and prevention of abnormal behavior. Open only to students with understanding of basic psychological principles and associated terminology. 3 hours.

6. SCIENCE

a. BIOLOGICAL SCIENCE

General Biology I (f). This course is recommended for those students who plan to take only five hours of biological science. No credit for students who have credit for General Zoology I or General Botany 2. A cultural course in the field of biology planned to give the student basic concepts in the fundamentals of biology and the application of these concepts to modern living. Three one-hour lecture periods and two two-hour laboratory periods per week. 5 hours.

General Zoology I (f). A detailed study of a vertebrate animal, followed by a general survey of the animal groups and studies of representatives of these groups. Three one-hour lecture periods and two two-hour laboratory periods per week. 5 hours.

General Botany 2 (w). A liberal education course emphasizing general biological principles, especially as applied to plants, consisting of a detailed study structure, function, and life cycle of selected typical seed plants plus a survey of the Plant Kingdom and its evolution. A one-semester, five-hour laboratory course consisting of three one-hour lecture periods and two two-hour laboratory periods per week. 5 hours.

Hygiene 3 (f and w). Study of principles of personal and social hygiene and public health. 3 hours.

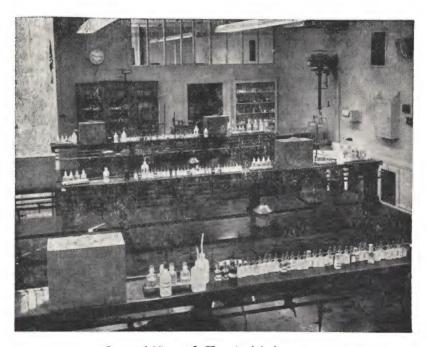
Anatomy and Physiology 5 (w). Prerequisite, General Zoology I with a minimum grade of "C" or permission of instructor. Includes study of structure of the cell, skeletal and muscular and nervous systems, and introduction to embryology. 5 hours.

b. PHYSICAL SCIENCE

General Chemistry I (f and w). Prerequisites, One and a half units of high school algebra, one unit of geometry, and a satisfactory score on an entrance test or Algebra I, or Modern Mathematics 6. Introduction to theories of chemistry with emphasis on the relationship of structure to properties of matter and the quantitative aspect of changes. Three lectures, one 3-period laboratory, and one problem-solving session per week. 5 hours.

General Chemistry 2 (f and w). Prerequisite, General Chemistry I with a minimum grade of "C" or permission of instructor. A continuation of General Chemistry I. Emphasis on applications of chemical equilibrium, electro-chemistry, aqueous solutions, and the chemistry of the elements as periodic groups. Three lectures and one problem-solving session per week. 3 hours.

Qualitative Analysis 3 (w). Prerequisite, Preceded or accompanied by General Chemistry 2. Identification of cations and anions. Application of principles presented in General Chemistry 2. One lecture and six periods of laboratory per week. 3 hours.



General View of Chemical Laboratory

Quantitative Analysis 4 (f). Prerequisite, Eight hours of college chemistry. Includes volumetric, gravimetric, and some potentiometric and spectrophotometric analyses. Three lectures and two three-period laboratories per week. 5 hours.

Organic Chemistry 5 (w). Prerequisite, Eight hours of college chemistry. Deals with both aliphatic and aromatic compounds, their structure, nomenclature, and reaction mechanisms. Three lectures and two three-period laboratories per week. 5 hours.

Fundamentals of Physical Science I (f and w). A course planned to give the student an image as to how science has developed historically, the basic concepts in fundamentals of chemistry, physics and other sciences, application of science to modern living, and a picture of some possible developments. Lecture, laboratory and demonstrations. 5 hours.

Elementary College Physics I (f). Prerequisite, Two units of high school algebra or College Algebra 3. Includes study of mechanics, properties of matter, heat, wave motion and sound. Lecture, laboratory, demonstration and problem-solving periods. 5 hours.

Elementary College Physics 2 (w). Prerequisite, Elementary College Physics 1. Includes study of electricity, magnetism, light and topics from modern physics. Lecture, recitation and problem-solving periods. 3 hours.

General College Physics 3 (f and w). Prerequisite, Analytic Geometry and Calculus 14. Analytic Geometry and Calculus 15 should be taken concurrently. Includes the study of mechanics, properties of matter, heat, wave motion and sound. Lecture, laboratory, problemsolving periods. 5 hours.

General College Physics 4 (f and w). Prerequisite, General College Physics 3. A study of electricity, magnetism, and light, with introductions to quantum properties of radiation and matter and to nuclear reactions. Lecture, laboratory, and problem-solving periods. 5 hours.

Introduction to Modern Physics 20 (w). Prerequisite, Analytic Geometry and Calculus 16 and General College Physics 4. A study of electrons, photo-electricity, relativity, quantum theory, positive rays, X-rays, elementary spectroscopy, radioactivity, atomic and nuclear structure, nuclear energy, and fundamental particles. Taught by lecture and problem solving. This course is designed for physics and engineering majors. 3 hours.

7. SOCIAL SCIENCE

a. Geography

Introduction to Geography I (f). A study of major climatic regions. Special emphasis is placed upon products of these regions; their importance in international trade; and their effect on populations. 3 hours.

b. History

Modern European History 3 (f). Study of growth of nations, and cultural and political developments from 1492 to 1815. 3 hours.

Modern European History 4 (w). Study of development in Europe from the Congress of Vienna to the present. 3 hours.

American History 5 (f and w). The foundations of American nationality, with special emphasis on the European heritage, evolution of colonial and national institutions, social and intellectual problems and the war between the states; the post-Civil War period with emphasis on the development of labor, farm, and business organizations, the growth of the Progressive tradition in politics and the United States' involvement in contemporary world affairs. 5 hours.

c. Political Science

General Economics 8 (w). Prerequisite, Sophomore standing. An introduction of the American economy. A study of the functioning of the competitive system, organization of business and labor, the economic role of government, the problems of production and consumption, money and banking, price determination, international trade, busness cycles, social movements and social legislation and economic welfare. 5 hours.

State Government 10 (f and w). The subject matter dealing with state and local government includes the following: a survey of some political ideologies, a study of constitutional structures; stress on popular government, examination of services and activities; and an analysis of selected major problems. 2 hours.

United States Government II (f and w). The subject matter is organized on principles and practices of government. Starting with the formation and structure of the federal government, successively, civil rights and responsibilities, legislature and public policy, administration, adjudication, and services and activities. 3 hours.

International Relations 12 (w). A general introductory course which includes the meaning of sovereignty, the evolution of the modern state system, factors which affect the power of a state, such as raw materials, political institutions, industrial, commercial and financial strength; the international positions and foreign policies of the great powers; history of recent international relations building for a more stable world. 3 hours.

Problems in Contemporary World History 13 and 14 (w). The United Nations is used as a basis for studying contemporary world problems. The course involves a study of this world organization, its structure and functions and its current problems. Students in the course will make a detailed study of the economic, social and political problems of a different country each semester. The class will meet one hour each week. I hour.

d. Sociology

General Sociology I (f and w). A survey of the development of man, human associations and social institutions, with a descriptive analysis of modern man and his socially determined activities and culture growth. 3 hours.

The Family 2 (w). Study of factors which make or mar homes, and of ways to promote better homemaking. 3 hours.

Introduction to Social Work 3 (f or w). The purpose of this course is to acquaint the student with social welfare programs and the development of services. The course will include professional opportunities in social work. Tax supported and voluntarily financed health and welfare programs will be considered. 3 hours.

COMMERCE

I. General Business

Accounting I (f). Fundamental principles as applied to modern business practice, including theory of debits and credits, journals, ledgers, balance sheets, and profit and loss statements. Meets five hours each week. 3 hours.

Accounting II (w). Prerequisite, Accounting I, or high school bookkeeping, or special permission of instructor. A study of various subjects, such as payrolls, insurance, depreciation, branch accounting, partnerships and corporations. 3 hours.

Accounting 12 (f). Prerequisite, Accounting II. Application of accounting principles to manufacturing statements, inventories, valuation accounts, and other special topics. 3 hours.

Accounting 23 (w). Prerequisite, Accounting 12 or special permission of instructor. Cost accounting and special subjects. 3 hours.

Business Communications 2 (w). Prerequisite, English I. Provides for the study of the principles for writing effective business letters. Students get experience in writing various kinds of letters: sales, credits, collection, adjustment, application and others. 3 hours.

Business Arithmetic 7 (f and w). A review of the fundamental process of arithmetic as applied to business. It also includes common and decimal fractions, percentage and markup, interest and bank discount, compound interest, payrolls and taxes, and financial statements. It should be taken concurrently with Accounting 1. 3 hours.

Statistics 7 (w). (See under Mathematics)

Economics 8 (w). (See under Social Science)

Introduction to Salesmanship 22 (f). An analysis of the techniques of personal, retail and general selling. Selecting sales appeals, planning the approach and the methods of effecting a favorable response. The objectives of the course are to develop skill in personal persuasion and to provide an introduction to modern selling activity. 3 hours.

Introduction to Business 24 (f). An introductory course in modern American business, including a study of the capitalistic system, ownership and organization, marketing, finance, law and taxation. Emphasis is placed on learning the "language" of business. The course provides a background for the student to choose an area for specialization. 3 hours

Advertising 25 (w). A study of the general principles of advertising, with special emphasis upon its use by retail organizations, including medium employed, sales promotion, layout construction and copy writing. Principals of interior and window display for retail stores. 3 hours.

Business Law 30 (w). Prerequisite, Sophomore standing or the consent of the instructor. A study of the principles of law and its enforcement as applied to American business. The course includes contracts, agency and employment, negotiable instruments, personal property and bailments and sales of goods. Special attention is placed on law terminology and cases and problems are used to illustrate the various aspects of business law. 3 hours.

Human Relations in Personnel Management 31 (f and w). A course in human relations with application of the dynamics of human behavior to industral situations. 3 hours.

Business Organization and Management 32 (f and w). Prerequisite six semester hours in business courses. A course in business organization and management with application of concepts and techniques to specific, realistic case situations. 3 hours.

2. Secretarial

Shorthand 3 (f). (Beginning Shorthand). A theory course in which the principles of shorthand are studied. Vocabulary building is stressed. Not open to students who have completed one year of shorthand in high school, except by permission of the instructor. Typewriting should precede or parallel the course. Meets five days each week. 3 hours.

Shorthand 4 (w). (Intermediate Shorthand). Prerequisite, Shorthand 3 or any course in which the theory has been completed. This is a dictation course, with a review of theory, and special attention given to developing efficient transcription procedures. Dictation will range from 60 to 100 words per minute, depending upon the ability of the students. The minimum speed requirement by the end of the semester is to write at least 80 words per minute with 95 per cent or more accuracy. 3 hours.

Shorthand 13 (f). (Advanced Shorthand). Prerequisite, Short-

hand 4 or the ability to take dictation at 80 words per minute. The emphasis in this course is to develop accuracy in transcription as well as to increase the rate of transcription. Dictation will range from 80 to 140 words per minute. The minimum requirement by the end of the semester is at least 100 words per minute with 95 per cent or more accuracy. 3 hours.

Shorthand 33 (w). (Advanced Shorthand) Prerequisite, Shorthand 13 or the ability to take dictation at 100 per words per minute. This is a course for the development of expert stenographers. A great deal of emphasis is placed upon accuracy and rate of transcription, and production of mailable letters. Dictation will range from 100 words per minute to 160 words per minute. The minimum requirement by the end of the semester is at least 120 words per minute with at least 95 per cent accuracy. A student who has taken 9 hours of shorthand and has earned a 120-word per minute certificate may be excused from this course. 3 hours.

Shorthand 33a (w) This course is for students who have had two years of high school shorthand and wish a third course in college. The minimum requirement by the end of the semester is 130 words per minute with 95 per cent accuracy if the student has previously met the requirements of Shorthand 33. 3 hours.

Typewriting 5 (f). (Beginning Typewriting). The chief emphasis in this course is to learn to minipulate the typewriter efficiently. The development of speed is stressed so that the student will, upon completion of the course, have a fair rate which will be of use to him personally. A few simple letter styles are taught as well as manuscript writing and simple tabulation. Meets five days a week. 3 hours.

Typewriting 6 (w). (Intermediate Typewriting). Prerequisite, Typewriting 5 or a good knowledge of the keyboard. This is primarily a letter-writing course. All the styles of business and personal letters are studied and written. Efficient methods of writing more difficult manuscripts and tabulations are also studied. Minimum requirement for passing is the ability to type 40 words per minute for ten minutes within the 5-error limit. 3 hours.

Typewriting 15 (f). (Advanced Typewriting). Prerequisite, Typewriting 6 or the ability to write 40 words per minute for ten minutes and a knowledge of letter writing. Production of mailable letters, manuscripts, reports, addressing envelopes, etc., is emphasized. Complicated manuscripts, business reports, tabulations, form letters and efficient use of multiple carbons are some of the materials which are studied. Minimum requirement for passing is the ability to write 50 words per minute for ten minutes within the 5-error limit. 3 hours.

Typewriting 16 (w). (Advanced Typewriting). Prerequisite, Typewriting 15 or the ability to write 50 words per minute for ten minutes. Legal typing is introduced and business forms are the chief emphasis in this course. The use of office typing projects to accustom the

students to office procedure is introduced the last part of the semester. Minimum passing requirement is 60 words per minute within the 5-error limit. 3 hours.

Secretarial Procedures 21 (w). Business ethics, secretarial duties common to all lines of business, such as handling mail, meeting callers, using the telephone, etc. The student receives instructions in the use of present day filing systems and their application to the various types of business. This course is offered for sophomores in the General Business curriculum. Freshmen may be admitted by permission of the instructor. 3 hours.

Office Machines 20 (f and w). Prerequisite, Typewriting. A laboratory course in the operation of the ten-key and full-key adding machines, the rotary and key-driven calculators, the transcribing machine, the posting machine and the spirit and stencil duplicators. The objective of the course is to develop enough skill for initial employment in the operation of these machines. Meets five days a week. 3 hours.

Office Machines 35 (f and w). Prerequisite, Office Machines 20. A laboratory course continuing the work as set up for Office Machines 20. Special emphasis is placed on developing additional skill in the operation of the rotary and key-driven caculators, the adding machines, the posting machine and the stencil duplicator. 3 hours.

FINE ARTS

I.. Art

Art Composition I (f and w). Study of history, materials and methods of creative art. 3 hours.

Art Composition 2 (f and w). Prerequisite, Art Composition I. Elementary training in drawing and color in relation to composition. 3 hours.

Art Composition 3 (f and w). Prerequisite, Art Compisition 2. Study of pictorial organization. 3 hours.

Art Composition 4 (f and w). Prerequisite, Art Composition 3. Creative Art. 3 hours.

Art Education 5 (f). Study of history, materials and methods of creative art as used by elementary teachers. 3 hours.

Elementary Ceramics 6 (f and w). Prerequisite, Art Composition I, or permission of the instructor. Introduction to materials and techniques in stoneware ceramics. 3 hours.

Art Appreciation 7 (f and w). Art in everyday life for the consumer. 3 hours.

Commercial Art 8 (f and w). Prerequisite, Art Composition I, or permission of the instructor. Basic study of layout, techniques and media used in lettering, newspaper, magazine, poster, packaging and similar advertising projects. 3 hours.

2. Music

College Choir I (f and w). The College Choir is open to any properly enrolled student with previous musical experience in choral work. Auditions are held at the beginning of each semester. The College Choir is limited to 60 members and includes concerts and performances for civic clubs and area schools with a tour when possible. May be taken for four semesters. I hour.

Vocal Ensemble 2 (f and w). The Vocal Ensemble is a small group of select voices. This group performs for civic programs and at special recitals. May be taken for four semesters. I hour.

Concert Band 3 (f and w). Open to all students with the consent of the director. The purpose of the Concert Band is to study and perform classic and contemporary works for winds. Performances include two major concerts each year and a portion of the Graduation and Baccalaureate exercises. May be taken for four semesters. I hour.

Stage Band 4 (f and w). Open to members of the Concert Band by consent of the director. Limited to 20 students. The purpose of the Stage Band is to study and perform techniques and literature available in the Concert Jazz field. Activities include two formal appearances each year, participation in Jazz Festivals, performances at assemblies and for civic groups. May be taken for four semesters. I hour.

Applied Music 5 (f and w). Applied music may be arranged for piano, voice and most orchestral instruments. Two thirty-minute lessons or one sixty-minute lesson per week is required for major study. May be taken for four semesters. I hour.

Applied Music 6 (f and w). Applied music in a minor area may be arranged for piano, voice and most orchestral instruments. One

thirty-minute lesson per week is required for minor study. String, wind, and voice majors are advised to minor in piano. May be taken for four semeseters. 1/2 hour.

Applied Musc 7 (f and w). A second minor may be taken with the same requirements and credits as Applied Music 6.

Keyboard Techniques 8 (f). Applications of primary and secondary chords to accompaniment patterns, including secondary dominants and modulation. I hour.

Keyboard Techniques 9 (w). Continuation of Keyboard Techniques 8 including transposition and emphasis on sight-reading and performance of a two-part invention. I hour.

Vocal Techniques 10 (f). Class instruction in the fundamentals of singing. Required of music majors who do not major or minor in voice. I hour.

Vocal Techniques II (w). Continuation of Vocal Techniques IO. I hour.

Woodwind Techniques 12 (f). Class instruction in teaching of woodwind. Intended for music majors. I hour.

Woodwind Techniques 13 (w). Continuation of woodwind Techniques 12. I hour.

Elementary Music Theory 14 (f). An intensive study of the basic materials of music developed through melodic, rhythmic and harmonic dictation, sight singing and written harmony. Triads, inversions, cadences, diatonic modulation. 5 hours.

Elementary Music Theory 15 (w). Continuation of Elementary Music Theory 14, including non-harmonic tones, seventh chords, altered chords and chromatic modulation. 5 hours.

Advanced Music Theory 16 (f). Prerequisite, Music Theory 15. Advanced work in aural perception, Neapolitan Sixth chords, Augmented Sixth chords, ninth, eleventh and thirteenth chords, harmonization of unfigured bass and soprana. 3 hours.

Advanced Music Theory 17 (w). Continuation of Advanced Music Theory 16. Modal harmony, introduction to contemporary music study of forms and their development and composition in simple forms, including theme and variation and two-part writing. 3 hours.

Music Masterpieces 18 ((f). Designed to enable one to understand music and its development through media, terminology, chronology and repertoire. Emphasis on music of the Romantic Period. Not intended for majors in music. 2 hours.

Music Masterpieces 19 (w). Designed to enable one to understand music and its development through media, terminology, chronology and repertoire. Emphasis on the Classical Era, Baroque, Impressionism and the 20th Century. Not intended for majors in music. 2 hours.

Music Literature 20 (f). A comparative study of music literature characteristic of the Ancient through the Baroque periods. Includes the

development of musical forms and styles. Intended for majors in music since score reading is involved. 3 hours.

Music Literature 21 (w). Continuation of Music Literature 20. Includes motive development and thematic analysis. Classic through Contemporary periods. 3 hours.

Music Fundamentals 22 (f). A comprehensive study of the rudiments of music for the classroom teacher. Practice is given in simple ear training, rhythms, major and minor modes, and harmony, including use of the autoharp. Recommended for elementary majors with a limited background in music. 3 hours.

Public School Music 23 (w). A survey of music in the American schools with emphasis on the techniques employed in the elementary grades; materials and methods; the playing of simple melody instruments for elementary grades; use of the autoharp. Observations are scheduled in the Joplin schools, grade one through six, with some student teaching where possible. Prerequisite, background in music or Music Fundamentals 22. Recommended for music and education majors who may be asked to assist in elementary school music. 3 hours.

HEALTH AND PHYSICAL EDUCATION

Play and Games I (w). Activities suitable for the playground, recreation centers, elementary and secondary schools. This course will not substitute for Physical Education. 2 hours.

Problems in Intramural Sports 5 (f). Designed to teach men how to carry on a program of intramural and recreational activities. Study of the rules and practice of touch-football, six-man football, soccer, handball wrestling, boxing, apparatus and tumbling. 3 hours.

Recreational Activities 6 (w). Study and practice of adult sports adaptable to junior and senior high school facilities and to recreational centers. Volleyball, badminton, tennis, speedball, flashball, golf, softball and baseball. 3 hours.

Rules and Officiating II (f). The rules of football and basketball and the mechanics of officiating these sports. 2 hours.

Scouting and Boys' Work 12 (w). Fundamental principles of the physical, mental and spiritual development of boys through the agency of various boys' clubs; how to conduct club meetings; the delinquent boy, program building and the principles of scouting; preparing teachers as Scout leaders. 2 hours.



This trophy case features the "JUCO" College Mascot.

PHYSICAL EDUCATION

All men and women students are required to take two courses in physical education for graduation from Missouri Southern College.

Physical Education I and 2 (f and w). Freshmen Men. Two periods each week. The activities offered will be decided by the instructor. I hour each semester.

Physical Education 3 and 4 (f and w). Freshmen Women. Two periods each week. The activities offered will be decided by the instructor. I hour each semester.

Physical Education 5 and 6 (f and w). Sophomore Men. Two periods each week. A continuation of I and 2. I hour each semester.

Physical Education 7 and 8 (f and w). Sophomore Women. Two periods each week. A continuation of 3 and 4. I hour each semester.

SECTION 4

TECHNICAL EDUCATION DIVISION

The Technical Division of Missouri Southern College is designed to help students prepare for responsible jobs in technical employment. Approximately half of the student's time will be spent in the major technical area of interest. The remainder of time is spent in technically-related and/or general education subjects that lead toward the development of a well-trained technical worker. in addition to the subjects that are taught to develop skills and give technical knowledge, general education courses are included to give the student a more thorough understanding of his duties and responsibilities as a citizen and technician.

The Guidance Department of the College and the services of the Missouri State Employment Service will be combined to carefully select people who will profit most by technical training. Students who satisfactorily complete a Technical Curriculum may receive special assistance from the Missouri State Employment Service in locating satisfactory employment that will utilize their newly-attained skills and knowledge.

The Technical Division of Missouri Southern College is housed in the Franklin Technical School, 13th and Pearl, where the technical shop skills are taught. General education subjects are taught as a part of the regular College program on the main campus.

Admissions

An application may be made by submitting a high school transcript to the Director of the Technical Division. All applicants will be screened and tested by the Missouri Southern College and the Missouri State Employment Service.

Applicants above 20 years of age who are not high school graduates and have passed the general Educational Development tests may enter when they have passed the required tests and have satisfied the school that they will profit from the course. The College Technical Division reserves the right to refuse any applicant who does not propose to use the training for entry into employment, and does not have the necessary ability and background.

If the classes are full at the time the application is made, the applicant will be placed on the waiting list. If there is a sufficient number, another class will be organized.

Attendance

Regular attendance is required for satisfactory completion of work. Students who are not making satisfactory progress will be requested to withdraw after adequate counseling.

Expenses and Payments

See page 23. No special laboratory or breakage fees are required.

Credit

All Technical courses taken at Franklin Technical School receive junior college credit and may apply toward the requirements for the Missouri Southern College Associate in Technology degree.

Requirements for Graduation

Upon completion of the prescribed courses as stated in the catalog, the student will be eligible for graduation.

Evening Classes

Evening classes will be offered in any of the technical courses in which there is a sufficient number enrolled to justify a class.

Electronic Technology

The Electronic Technology is in an area having facilities for 20 students at one time in the laboratory and a class area for lectures and demonstrations. The equipment consists of the Philco Electronics Training Course, Oscilloscopes, Volt Meters, Ohm Meters, Signal Generators and Tube Testers and many pieces of circuit testing instruments.

Mechanical Technology

At Franklin Technical School, a completely modern-equipped industrial type drafting room is available with drafting machines, special drafting tables, and many industrial drafting aids. These make it possible for the student to develop skills on specialized or industrial-type equipment. The machine shop is recognized as one of the most modern school-equipped shops in the midwest. Sufficient numbers of industrial-type machines are available in the area of lathes, vertical mills, horizontal mills, shapers, drill presses, surface, interior and external machine grinders, and special machines such as radial drills, turrets and profile machines to equip students with technical operational skills and information

Electronic Technology

Degree: Associate in Technology

- 1. Courses required for Electronic Technology:

Geometry and Calculus 14 3-5 sem. hours

^{*} Basic technical mathematics is for studests who do not have adequate mathematical background.

	2-3 semester hours
	3 semester hours 3 semester hours
Technical Electronics Course 143, 144, 145, 146, 148,	s 140, 141, 142, , 149 45 semester hours
United States Government Government 10	II and State 5 semester hours
Technical Science 190 or E College Physics I	lementary 3-5 semester hours
Research Report 191	I semester hour
Physical Education	2 semester hours
2. Suggested order of study:	
FRESHMAN	YEAR
First Semester Technical Mathematics 111 3 hours or Algebra & Trigonometry 5 5 hours Technical Drafting 120 3 hours or Engineering Drawing 1 2 hours English 1 3 hours Technical Sheet Metal 170 3 hours Electronics and Electrical Fundamentals 141 6 hours Physical Education 1 hour	Second Semester Technical Mathematics 112 3 hours or Analytic Geometry and Calculus 14 5 hours Technical Report Writing 131 2 hours Graphic Analysis 115 3 hours Basic Electronics 142 6 hours Time Varying Circuits 143 3 hours Physical Education 1 hour
10-20	1020
SOPHOMORE	
First Semester Technical Science 190 3 hours or Elementary College Physics 1 5 hours U. S. Government 11 3 hours Circuit Tracing 144 3 hours Electronic Circuit Design and Analysis 145 6 hours	Research Report 191 1 hour State Government 10 2 hours Ultra High Frequency and Microwaves 140 6 hours Television Circuits 148 3 hours Industrial Electronics 149 6 hours
Transmitter Theory and Operation 146 6 hours	18
21 or 23	

MECHANICAL TECHNOLOGY

Degree: Associate in Technology

I. Courses required for Mechanical Technology:

*Basic Technical Mathematics 110	
Technical Mathematics III or Algebra and Trigonometry 5	°S
Technical Mathematics 112 or Analytic Geometry and Calculus 14	°S
Technical Drafting 120 or Engineering Drawing I	`S
Technical Machine Courses 161, 162, 163, 164 and 122 27 semester hour	`S
United States Government II and State Government IO	`S
Technical Science 190 or Elementary College Physics I	S
Research Report 191 I semester hou	Γ
Technical Drafting 121 3 semester hour Technical Welding 180 3 semester hour	S
Quality Control Methods 165 3 semester hour	
Strength of Materials 166	
Production Planning and Progress 167 3 semester hours	
Physical Education	

^{*} Basic Technical Mathematics is for students who do not have adequate mathematical background.

2. Suggested order of study:

FRESHMAN YEAR

First Semester		Second Semester		
Technical Mathematics 111 3 h	nours	Technical Mathematics 112	3	hours
Algebra and		Analytic Geometry and		
Trigonometry 5 5 h Technical Drafting 120 3 h		Calculus 14 Technical Report	5	hours
or		Writing 131	2	hours
Engineering Drawing 1 2 h English 1 3 h	ours	Graphic Analysis 115 Technical Machine		
Technical Sheet Metal 170 3 h Technical Machine		Operation 162 Technical Drafting 121		
Operation 161 6 h Physical Education 1 h		Physical Education	1	hour

SOPHOMORE YEAR

First Semester	Second Semester
Technical Science 190 3 hours	Research Report 191 1 hour
Or	State Government 10 2 hours
Elementary College	Technical Machine
Physics 1 5 hours	Operation 164 6 hours
Technical Welding 180 3 hours	Technical Machine
U. S. Government 11 3 hours	Design 122 3 hours
Technical Machine	Quality Control
Operation 163 6 hours	Methods 165 3 hours
Strength of Materials 166 3 hours	Production Planning and
	Processes 167 3 hours
19 0= 20	2.0
10 01 20	18

COURSE DESCRIPTIONS

Industrial Power Distribution 90 (f and w). A lecture course on basic fundamentals of wiring electric circuits, voltage selection and regulation, power factor improvement, protection and control devices, preventive maintenance, system planning and equipment selection and grounding. 2 hours.

Basic Technical Mathematics IIO (f and w). A basic course for students who do not have credit in algebra and geometry. It cannot be substituted for Technical Mathematics III. No Credit.

Technical Mathematics III (f and w). Review of basic mathematics, algebra, and the fundamental concepts of trigonometry; use of tables, solution of right triangles, with emphasis on application of mathematics to problems in electronics and mechanics. 3 hours.

Technical Mathematics 112 (w). Mathematics used in solving problems involving vectors harmonic motion; complex notation and vector algebra; graphic methods used in solving problems relating to slope and rate of slope change; some basic calculus, including limits, differentation and integration. 3 hours.

Technical Drafting 120 (f). Designed for students with limited experience in drafting. Use of templates, drafting machines and fundamental practices; electrical circuit drawing terms, symbols and standards. One hour lecture, two 2-hour laboratory periods per week. 3 hours.

Technical Drafting 121 (w). Prerequisite, Technical Drafting 120 or Engineering Drawing I. Application of drafting techniques in respect to tolerance; threads, fasteners and springs; working drawings; axonometric projection; oblique projection, gearing, cams and technical engineering graphics. Laboratory 6 hours per week. 3 hours.

Graphic Analysis 115 (w). Graphic representation and graphic analysis. Layout methods used in pattern and template work, graphs, charts, and plots with an introduction to descriptive geometry and graphic calculus. Lecture one hour and laboratory two hours per week. Prerequisites, Technical drafting 120 and Technical Mathematics 111, or equivalent. 3 hours.

Technical Sheet Metal 170 (f). An introductory course required for all students in technical courses, designed to provide skills in use of tools and machines as applied to light metals; special emphasis on sodering and layout. One hour lecture and 5 hours laboratory per week. 3 hours.

Technical Welding 180 (f and w). Introductory course required of all metal technical students. Basic principles for oxyacetylene welding, cutting and electric arc welding will be given. One hour lecture and five hours laboratory per week. 3 hours.

Technical Science 190 (f). Graphical and mathematical analysis of forces, laws of motion machines, mechanical power, fluid mechanics, and external conductivity. Course work is extremely practical in nature with the emphasis on applied problems. Lecture 3 hours, laboratory 3 hours per week. 3 hours.

Research Report (Special Problem) 191 (w). Individual assignment to develop apparatus of special interest to the student with the instructor's approval. Frequent conferences between student and adviser will serve to guide the student's progress and the preparation of his report. This course may consist of library research dealing with the field of electronics or mechanics. The report should follow an accepted form of presentation. Laboratory 6 hours. I hour.

Technical Report Writing 131 (w). Techniques of collecting and presenting scientific data, informal reports and formal reports. Forms and procedures for technical reports are studied and a pattern is established for all formal reports to be submitted in this and other courses. Prerequisite, English 1. 2 hours.

Ultra High Frequency and Microwave 140 (f). Line sections, wave guides and cavities; UHF tubes and oscillators; kylstrons, magnetrons and traveling-wave tubes; microwave systems. Prerequisites, 141. 142 and 143. Three hours lecture and six hours laboratory per week. 6 hours.

Electronics and Electrical Fundamentals 141 (f). Includes basic physics of the electron, electro units, and Ohm's Law, resistance combinations, meter connections, magnetism and magnetic circuits and electric power. Characteristics of electric conductors, inductance and capacitance. Lecture 3 hours and laboratory a minimum of 3 hours per week. 6 hours.

Basic Electronics Concepts and Circuits 142 (w). Introduction to the technical concepts of electronic components and circuits. Principles of vacuum tubes and transistors; tuned circuits and basic circuits for power supplies, detectors, amplifiers and oscillators; radio receivers, use of basic testing devices and measuring instruments. It is designed to follow Electronics and Electrical Fundamentals 141, and should be taken concurrently with Time Varying Circuits 143. Lecture 3 hours and laboratory a minimum of 3 hours per week. 6 hours.

Time Varying Circuits 143 (w). Characteristics of alternating current waves and time varying circuits; analyzing the behavior of alternat-

ing current components, phase and power factor; power measurement under balanced and unbalanced conditions; application of vector algebra in the analysis of series and parallel combinations of impedance. Lecture 3 hours, laboratory 6 hours per week. 3 hours.

Circuit Tracing 144 (f). Study of layout and representation. Problems in circuit design involving switches, relays and electronic components. Concentration of schematic representation of electronic equipment apart from the specific schematic diagrams for purpose of analysis and study. Prerequisite, Basic Electronics Concepts and Circuits 142. Lecture I hour, laboratory 3 hours per week. 3 hours.

Electronics Circuit Design and Analysis 145 (f). Acoustics and electro-acoustic devices; sound recording, design and testing of voltage and power amplifiers; inverse feedback, transistor amplifiers, computer circuits. A composite course covering several applications of electronics. The units covered are common to many fields of electronics and should be considered basic to the needs of an electronic technician. Prerequisite, Basic Electronics Concepts and Circuits 142. Lecture 3 hours and laboratory 6 hours per week. 6 hours.

Transmitter Theory and Operation 146 (f). Amplitude modulation and frequency oscillators and power amplifiers, antennas, modulation and radio-frequency measurements. Requirements for Government radio-operator licenses; electromagnetic transmissions and communication application. Prerequisite, Basic Electronics Concepts and Circuits 142. Lecture 3 hours, laboratory 6 hours per week. 6 hours.

Television Circuits 148 (w). Principles of television transmission and reception, with emphasis on circuits for pulseshaping that are used in other electronic applications; picture scanning, synchronization, video amplifiers, colored television and industrial closed-circuit systems. The emphasis throughout this course is on circuit analysis and the behavior of wave-shaping circuits and not on T V servicing. Prerequisite, Transmitter Theory and Operation 146. Lecture 3 hours, laboratory 3 hours per week. 3 hours.

Industrial Electronics 149 (w). Time constant and electronic timing circuits; photo electric controls; welder and motor controls; saturable reactors and magnetic amplifiers; synchro and servomechanisms; induction and dielectric heating; radiation detection; applications in the field of industrial control and automation; combination of electrical, electronic, magnetic and mechanical principles. Prerequisite, Basic Electronics Concepts and Circuits 142. Lecture 3 hours, laboratory 6 hours per week. 6 hours.

Technical Machine 161 (f). Principles underlying all metal cutting operations, measuring tools, and lathe tool grinding. The major portion of laboratory practice will be fundamental operation of the engine lathe. Vertical and radial drill press operation will be included. Lecture 3 hours laboratory 6 hours per week. 6 hours.

Technical Machine 162. (w). A continuation of technical information and laboratory experience; special skills in operation of the en-

gine lathe, turret lathe operation; tooling and set up of actual production job. Prerequisite, Technical Machine 161, or qualifying previous machine experience. Lecture 3 hours, laboratory 9 hours per week. 6 hours.

Technical Machine 163 (f). Technical information in layout, planning process and its general application. Milling flat, curved and irregular surfaces, use of index head, and special gear calculation and cutting. Shaper set up and use will be offered. Prerequisite, Technical Machine 161 and 162, or qualifying previous machine experience. Lecture 3 hours, laboratory 9 hours per week. 6 hours.

Technical Machine 164 (w). Technical information pertaining to tool steels, materials and heat treatment of various metals. The laboratory will provide experiences on grinders, surfacers, cylindrical, internal grinders, grinding milling cutter and reamers. Lecture 3 hours, laboratory 6 hours per week. 6 hours.

Technical Machine Design 122 (f). A study of manufacturing processes as they affect the designer; tolerances and allowances, springs, cutting tools, welding fabrication; punch and die design; elementary jig and fixtures; gages and gage design; practical design of jigs and fixtures, cam design; and turret-lathe tooling. A selected design will be built in the machine shop by the designer. Lecture and laboratory 6 hours per week. Prerequisite, Technical Machine 162 or 163, Technical Drafting 121 or qualified previous experience. 3 hours.

Production Planning and Processes 167 (w). Use of the operation sheet as applied to machine manufacturing. Emphasis is placed on modern production and process engineering methods, and their application to management and production planning. A study of purchasing, production control system, time study, and the use of electrical, mechanical, pneumatic and hydraulic controls to provide for automation. Lecture 3 hours, laboratory 3 hours.

Strength of Materials 166 (f). Important principles of mechanics used in strength of materials; center of gravity; stress and relationships; thin-walled cylinders and spheres; shear bending movements; deflection of simple beams; applied loads; columns stresses and fatigue strengths. Lecture I hour, laboratory 2 hours. 3 hours.

Quality Control Methods 165 (w). Study and observation of local plant quality contol system. Problem of product quality and ways to improve quality practices; use of measuring instruments and procedure check methods. Lecture 2 hours, laboratory and plant visitations 4 hours. 3 hours.

INDEX TO CATALOG, 1966 - 1967

A		Calendar for 1966-1967	
Accounting	61	Changes in Schedule	22
Accreditation	13	Chart, The	29
Acting, Beginning	53	Chemistry	EO
Activities Ctudent	35	Citation	50
Activities, Student	25	Chemistry, Organic	59
Participation in School		Children's Literature	53
Activities	25	Circle K Club	28
Administration, Officers of	7	Class Attendance	
Admission	19	College Choir	45
Freshman Class 18 and	22	College Chon	27
		College Players	21
Auditors		Collegiate Council for	
Permits to Enroll		United Nations	
Sophomore Class	23	Commerce Courses	61
Special Students	19	Counseling	14
Technical Division	70	Course Numbers	52
Transfer Students	19	Credits, Explanation of 52,	40
Votorans	10	Credits, Explanation of 52,	07
Veterans		Crossroads, The	29
Adult Education		Culture, General	38
Advanced Standing	20	—D—	
Advertising	62	Degrees	20
Agriculture Curriculum	30	Deficiencies, Scholastic	22
Aid to Students	17	Deliciencies, Scholastic	27
		Dental Curriculum	
Algebra	54	Description of Courses	52
Analysis, Qualitative	58	Directing, Beginning	53
Quantitative	59	Directory, Student	29
Analytic Geometry & Calculus		Dramatic Interpretation	53
Calculus	55	Drawing, Engineering	55
Anatomy and Physiology	57		55
Arithmetic, Business	61	—E—	
Armod Convices	13	Economics, General	60
Armed Services	15	Electronic Technology	71
Art 64,		Elementary Education	
Arts and Science Curriculum	32	Curriculum	50
Assembly	16	Secondary Education	00
Athletic Field and			г.
Gymnasium	14	Curriculum	51
Athletics	18	Engineering Curriculum	3/
Attendance	22	Engineer's Club	26
	22	English and Speech 52 &	54
—B—		Business Communications	61
Board of Regents	_ 5	Exposition	
Board of Trustees	- 5	Survey of Journalism	52
Botany, General	57	Literature 52,	52
Buildings and Grounds	13		
Bus. Administration	13	Enrollment Permits	
	22	Entrance	
Curriculum	33	Admission	
Business Courses	61	Transfer	19
Business Curriculum		Late Registration.	24
(one year)	34	Requirements	20
Business Curriculum		Fauinment General	13
(two year)	35		
Business, Introduction to	41	Cafeteria	16
		Grounds and Buildings	13
Business Law	62	Library	14
c		Gynasium and Athletic	
Cafeteria	16	Fields	14

INDEX

Evening Classes 13,	71	Hygiene	67
Examinations	15	_ _	
Advanced Standing	20	Information, General	12
Guidance	15	InstructorsInternational Relations	8
Expenses and Payments	23	International Relations	60
Living Quarters for	1.4		
StudentsTuition and Fees	22	Journalism Curriculum	39
	23	1	
F	7	Languages	53
Faculty		Languages	53
Family, The	21	French	54
	23	Spanish	54
Registation		Law Curriculum	40
	23	Library	14
Matriculation	23	Literature	52
	23	Living Quarters	14
	23	Loans to Students	17
	24	Location of the College	12
	24		
Late Registration	24	M ''Math Club''	27
Change in Program		Mathematics	54
Transcript	24	Medical Technology	73
Refund of Fees	24	Medical Curriculum	41
Franklin Technical School	13	Medical Technologist	
French	53	Curriculum	42
Freshmen	23	Modern Language Club	27
—G—		Music	43
General Culture Curriculum		Activities	65
General Information	12	Applied Curriculum	43
Geometry, Descriptive	55	Courses	65
	55	Masterpieces	68
German	54	Theory	68
Government, United States	10	—N—	
and State	60	N. E. A.; Student	26
Grade Reports	21	New Students	
Grading	20	Instructions for	19
Graduation Requirements	20	Nursing Curriculum	31
Grounds and Buildings	13	-0-	
Guidance	15	Office Machines	64
—H—	, ,	Optometry Curriculum	45
Handbook, Student	29	Organizations, Student	25
Health and Physical	21	—P—	
Education	68		17
History	60	Pharmacy Curriculum	46
History of College	12	Phi Theta Kappa	26
Honors	21	Physical Education Courses	68
Hours, Definition of	52	Physical Education	
Human Relations in Personnel		Curriculum	77
Management		Fundamentals of	
Housing	14	Physical Science	59

INDEX

		13
48		
59		
17	Slide Rule	55
53	Social Science	50
28	Social Work Curriculum 4	19
60	Sociology	51
	General	61
56	The Family	51
56	Introduction to Social	
	Work	61
		64
	Special Students	19
	Speech	53
	Stagecraft	53
	Statistics	56
	Student Activities	25
		25
29	Student Personnel Services	14
- '	Student Senate	25
	Student Transfers	19
58		
59		2
		3
21	Teacher-Training	FO
4	Consider Level	50
	Table 1 Formation 70	77
25	Technical Education 70-	13
25	The standardies to	13
21		
	Theory (Music)	24
50	Transcript	10
21	Transfer Students	17
27	Irigonometry	22
	Tuition and rees	43
		03
20		
22	Veterans	13
	W	
62	Withdrawals	22
30		den den
15	_Y_	,
60	Year, College	. 6
	Young Democrats Club	28
51	Young Republicans' Club	28
62	Y. W. C. A	26
	—Z—	
	Zoology, General	57
35	37.	
	53 12 29 58 59 24 6 25 25 21 30 52 21 22 20 22 20 22 50 60 50 60 60 60 60 60 60 60 60 60 60 60 60 60	48 Semester Hour 59 Shorthand 17 Slide Rule 53 Social Science 28 Social Work Curriculum 60 Sociology 22 General 55 The Family 56 Introduction to Social 57 Work 58 Spanish 59 Stagecraft 65 Statistics 53 Student Activities 53 Student Personnel Services 54 Student Senate 55 Student Senate 56 Student Transfers 57 Table of Contents 58 Technical Education 59 Technical Education 50 Technical School 51 Transfer Students 52 Transfer Students 53 Transcript 54 Transfer Students 55 Transfer Students 56 Secondary Level 57 Technical Education 58 Technical Education 59 Technical School 50 Transcript 51 Transfer Students 52 Transfer Students 53 Transfer Students 54 Trigonometry 55 Transfer Students 56 Transfer Students 57 Transfer Students 58 Transfer Students 59 Transfer Students 50 Transcript 51 Trigonometry 52 Transfer Students 53 Transfer Students 54 Trigonometry 55 Transfer Students 56 Transfer Students 57 Transfer Students 58 Transfer Students 59 Transfer Students 50 Transcript 51 Transfer Students 52 Transfer Students 53 Transfer Students 54 Transfer Students 55 Transfer Students 56 Transfer Students 57 Transfer Students 57 Transfer Students 58 Transfer Students 59 Transfer Students 50 Transfer Students 51 Trigonometry 52 Transfer Students 53 Transfer Students 54 Transfer Students 55 Transfer Students 56 Transfer Students 57 Transfer Students 58 Transfer Students 59 Transfer Students 50 Transfer Students 50 Transfer Students 50 Transfer Students 51 Trigonometry 52 Transfer Students 53 Transfer Students 54 Transfer Students 55 Transfer Students 56 Transfer Students 57 Transfer Students 58 Transfer Students 59 Transfer Students 50 Transfer Students 50 Transfer Students 50 Transfer Students 51 Transfer Students 52

The state of the s

Accident to the further of the feature level and proved the second second and the second seco

The second of th

The second secon

ADDENDUM TO THE 1966-67 COLLEGE CATALOG

- 152 Introduction to Anthropology. (f,w) Exploration of "preliterate" (commonly called "primitive") cultures on the introductory level. Some attention is given to physical anthropology, but chief emphasis is upon cultural anthropology. Comparisons are made between "preliterate" and "literate" culture. 3 hours.
- 280 Introduction to Philosophy. (f,w) A survey study of the principal problems of philosophy and typical solutions, and a resume of the major schools of philosophical thought. 3 hours.
- 245 Social Problems. (w) Concentration of attention is upon the aspect of modern cultures which have become socially defined as "problem" areas and social "issues." Among the topics included are personality adjustment strains, the "problem" aspects of marriage and family, population problems, various forms of deviancy, and intergroup relations of a conflict nature 3 hours.
- la English. (f,w) A course designed for students whose placement scores indicate a need for additional work. Three hours of class work per week plus two hours of laboratory. (Work will be paced to the abilities of the students, with considerable attention to individual needs as determined by regular individual conferences) 3 hours.
- 7a English. (f) A special Composition and literature course for students who demonstrate exceptional proficiency on placement tests. (English 7a satisfies the General Education requirements in English composition. High quality work is demanded and more materials are covered than in regular English 1.) 6 hours.
- 5 Applied Music. (f,w) (To description in catalog add:) Jury examination required. 2 hours.
- 6 Applied Music (f,w) (To description in catalog add:) Jury examination required. 1 hour.
- 23 Public School Music. (w) (Change title to:) Music For the Elementary School (w) (Delete in description on page 67, "Recommended for music and education majors who may be asked to assist in elementary school music." (Add:) "Required for elementary education majors. Sophomore standing." 3 hours.
- 100 Fundamentals of Nursing. (f) A course designed to orient the student to the role of the professional nurse. Includes ethics, history of nursing, personal hygiene, nutrition, medical asepsis, and medications. The approach is to introduce the student to the role of the nurse in meeting needs common to all patients and to the privileges and responsibilities of the professional nurse. The student is given an opportunity to acquire knowl-

edge, skill, and attitudes essential for the practitioner of nursing, based on principles of physical, biological and behavioral sciences. Pre and Post conferences with supervised practice. Three hours lecture a week. 8 hours laboratory. 5 hours.

- 120 Medical and Surgical Nursing I. (w) (Prerequisite: Fundamentals of Nursing. Theory and supervised practice are provided for nursing care of adults, pre-, intra-, and post-operatively; of patients with long-term and rehabilitative needs, those receiving radiation, and those with neo-plasms as they occur in various anatomic locations. Experience for each student is varied to include both medical and surgical conditions. Includes pharacology, diet therapy, and emergency nursing. Pre and Post conferences with supervised practice. Five hours class a week. 12 hours Clinical Laboratory. 8 hours.
- 130 Psychiatric Nursing. (s) This course is planned to help the student develop an understanding of the general principles of psychiatric nursing. Supervised practice in the application of these principles is provided with pre and post conferences with student. Includes the prevention of illness and rehabilitation with pharacology and diet therapy integrated. 4 hours class. 16 hours Clinical Laboratory. 4 hours.
- 140 Growth and Development. (s) A study of physical, mental and emotional development from conception, infancy through senesence. Concepts and principles basic to understanding of human development and human relations. 3 hours
- 100 Automotive Technology I. (f) The development of engines from their inception to their present advanced form with special emphasis on internal combustion engines. Design and operation of the internal combustion engine emphasizing problems concerning heat, combustion, and power. Students will disassemble and inspect internal parts, tracing cooling and lubricating systems; reassemble and trial run internal combustion engines. Three hours lecture. 12 hours laboratory per week. 5 hours.
- 120 Automotive Technology II. (w) The study of electrical, ignition and carburetion systems of the internal combustion engine. Emphasis is placed on the function, operation, repair, and adjustment of the component parts of each of these systems with special emphasis being given to styles and brands most widely used in the automotive industry at the present time. Three hours lecture. 12 hours laboratory per week. 5 hours.
- PE 150 Foundations of Physical Education I. (f) Designed to acquaint the student with the philosophical and theoretical background of Physical Education and to develop skills and understandings of selected activities commonly found in the public

school program. Students will be required to meet minimum levels of proficiency in the activities covered before enrolling in advanced professional courses. This course is taught by a team composed of members from both the men and women's physical departments. The course meets for two periods daily. 4 hours.

- PE 151 Foundations of physical Education II (w) Continuation of PE 150. 4 hours.
 - 1 Accounting (f,w) (Delete) "Meets five hours each week."